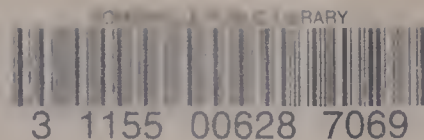





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DEP RTN 3-23246

Volume 1: Text Tables, Figures,
Appendix A, Appendix B

**IRA Status Report No. 2 and Plan
Modification No. 3**

50 Tufts Street, Somerville, MA


Submitted to:
UniFirst Corporation
68 Jonspin Road
Wilmington, MA 01887

Submitted by:
GEI Consultants, Inc.
1021 Main Street
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November 13, 2006
Project 04516-2

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Ileen S. Gladstone, P.E., LSP
Vice President



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Water Resources
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DEP RTN 3-23246

Volume 2: Appendix B (continued)

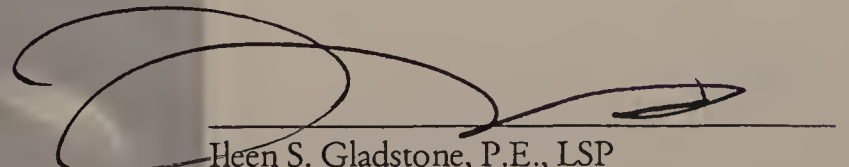
**IRA Status Report No. 2 and Plan
Modification No. 3**

50 Tufts Street, Somerville, MA

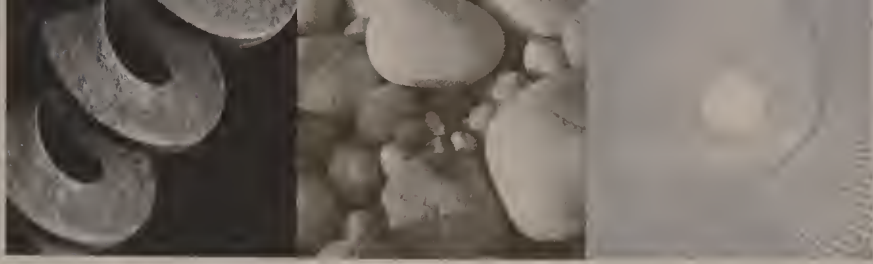
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Volume 3: Appendix C, Appendix D and
Appendix E


**IRA Status Report No. 2 and Plan
Modification No. 3**

50 Tufts Street, Somerville, MA

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Project 04516-2



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Volume 4: Appendix E (continued)

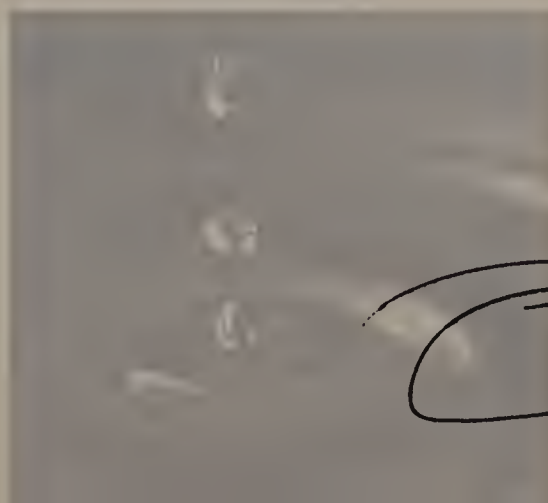
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50 Tufts Street, Somerville, MA

Submitted to:
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November 13, 2006
Project 04516-2



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Volume 5: Appendix F

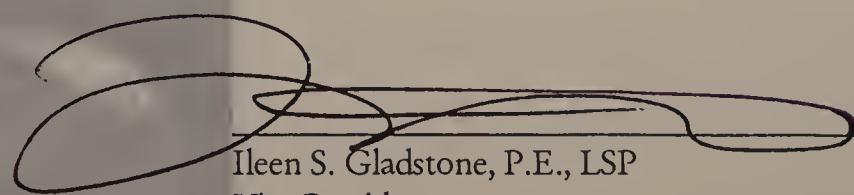
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50 Tufts Street, Somerville, MA

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Water Resources
Engineering

DEP RTN 3-23246

Volume 6: Appendix F (continued),
Appendix G

**IRA Status Report No. 2 and Plan
Modification No. 3**

50 Tufts Street, Somerville, MA

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Table of Contents

| | |
|---|-----------|
| Executive Summary | 1 |
| 1. Introduction | 4 |
| 1.1. Background | 4 |
| 1.2. Contact Information | 5 |
| 1.3. Purpose | 5 |
| 1.4. Submittals | 6 |
| 2. Summary of Indoor Air Sampling | 7 |
| 2.1. Second Quarter Sampling (June and July 2006) | 7 |
| 2.2. Additional Sampling (August 2006) | 7 |
| 2.3. Third Quarter Sampling (October 2006) | 7 |
| 2.4. Work Plan and Quality Assurance Project Plan | 7 |
| 2.5. Indoor Air Sampling - Pre-Sampling Survey | 8 |
| 2.6. Air Sampling | 8 |
| 2.6.1. Air Sampling – Checklist and Methods | 8 |
| 2.6.2. Air Sampling – Locations and Duplicates | 8 |
| 2.6.3. Air Sampling - Exterior Samples (June through August) | 9 |
| 2.6.4. Air Sampling - Exterior Samples (September and October 2006) | 9 |
| 2.6.5. Air Sampling - Trip Blank | 10 |
| 2.7. Meteorological Conditions | 10 |
| 2.7.1. Meteorological Conditions (June, July, and August 2006) | 10 |
| 2.7.2. Meteorological Conditions (September and October 2006) | 10 |
| 2.8. Indoor Air Chemical Testing | 11 |
| 3. Subsurface Investigation | 12 |
| 3.1. Previous Subsurface Investigations | 12 |
| 3.2. Soil Boring and Monitoring Well Installation | 12 |
| 3.3. Soil Sampling | 13 |
| 3.4. Groundwater Level Measurements | 13 |
| 3.5. Groundwater Sampling (May 2006) | 13 |
| 3.6. Additional Groundwater Sampling (August 2006) | 13 |
| 3.7. Groundwater Sampling (October 2006) | 13 |
| 4. Chemical Testing Results | 15 |
| 4.1. Air Chemical Testing Results | 15 |
| 4.1.1. Air Chemical Testing Results (June, July, and August 2006) | 15 |
| 4.1.2. Air Chemical Testing Results (September and October 2006) | 16 |
| 4.2. Soil Chemical Testing Results (April and May 2006) | 16 |
| 4.3. Groundwater Chemical Testing Results | 16 |

| | | |
|-----------|--|-----------|
| 4.3.1. | Groundwater Chemical Testing Results (May and August 2006) | 16 |
| 4.3.2. | Groundwater Chemical Testing Results (October 2006) | 17 |
| 5. | Investigation Derived Waste | 18 |
| 6. | IRA Modification | 19 |
| 6.1. | IRA Plan Modification No. 2 (September 2006) | 19 |
| 6.2. | Planned IRA Activities | 19 |
| 6.2.1. | Soil Boring and Groundwater Monitoring Wells | 19 |
| 6.2.2. | Soil Gas Survey Sampling Points | 20 |
| 6.2.3. | Groundwater Gauging | 20 |
| 6.2.4. | Outdoor Air Sampling | 20 |
| 6.2.5. | Soil Gas Sampling | 20 |
| 7. | Limitations | 21 |

Tables

1. Deviations from the QAPP
2. Groundwater Elevations
3. Chemical Testing Results – Indoor Air Samples
4. Summary of PCE concentrations in Indoor Air Samples
5. Chemical Testing Results – Outdoor Air Samples
6. Chemical Testing Results – Soil Samples
7. Chemical Testing Results – Groundwater Samples

Figures

1. Site Location Map
2. Air Sampling Locations June/July/August 2006
3. Air Sampling Locations September/October 2006
4. Proposed Sampling Locations

Appendices

- A. Copy of IRA Status Report Transmittal Form (BWSC105)
- B. Summa Canister Certifications and Air Sampling Laboratory Data Sheets
- C. Ambient Air Sampling Checklists and Sample Location Photographs
- D. Boring Logs and Monitoring Well Installation Reports
- E. Soil Chemical Testing Laboratory Data Sheets
- F. Groundwater Chemical Testing Laboratory Data Sheets
- G. Hazardous Waste Manifests

Executive Summary

On behalf of UniFirst Corporation, of Wilmington, Massachusetts, GEI Consultants, Inc. prepared this Immediate Response Action (IRA) Status Report No. 2 and IRA Plan Modification No. 3 for the site located at 50 Tufts Street in Somerville, Massachusetts (the Site). Based on the results of assessments conducted to date, the Site includes the 50 Tufts Street property (the Property), together with portions of properties located across that public street to the east of the Property. The Property is approximately 51,111 square feet and developed with an approximately 20,594-square-foot, one-story, masonry block building. The majority of the building is warehouse space and a small portion is office space.

The Massachusetts Department of Environmental Protection (DEP) assigned Release Tracking Numbers (RTNs) 3-23246, 3-24358, and 3-24376 to reported releases associated with the Site. The Site is currently classified Tier IC. The RTNs for the Site were consolidated under RTN 3-23246 at the time the Tier IC permit application was submitted to DEP on June 16, 2006.

Chlorinated volatile organic compounds (VOCs), particularly tetrachloroethylene (also called perchloroethylene [PCE]), have been measured in soil, groundwater, and indoor air at the Site. The source of the chlorinated VOCs is likely associated with the historic handling, storage, and distribution of laundry and dry cleaning chemicals at the Property.

The purpose of the IRA Status Report No. 2 is to provide the results of subsurface investigations in the vicinity of the Site and indoor air sampling conducted at residential properties along Tufts Street between March and October 2006. The scope of the IRA Plan Modification is to:

- Install and sample additional groundwater monitoring wells.
- Collect soil gas samples at selected groundwater monitoring wells.
- Perform monthly groundwater-level gauging in existing and proposed monitoring wells.
- Collect additional outdoor air samples in the vicinity of the Site.

Indoor Air Sampling and Testing

GEI collected second quarter 2006 indoor air samples on June 28 and 29, 2006, at 11/13, 19, 23, and 27 Tufts Street. We were unable to obtain access at that time to 9, 17, and 25 Tufts Street. We subsequently sampled 9 and 25 Tufts Street on July 24 and August 1, 2006, respectively. After numerous attempts to contact the residents at 17 Tufts Street, we were unable to obtain access to that residence during the second quarter 2006 sampling round.

Higher concentrations of PCE in indoor air were detected in the first floors at 11/13, 19, 23, and 27 Tufts Street and in the basements at 11/13, 23, and 27 Tufts Street in the June 2006 samples than those collected in March 2006. At 9, 11/13, 19, and 25 Tufts Street, the differences in concentrations from March to June 2006 were not substantial.

However, PCE concentrations in the basement samples of 23 and 27 Tufts Street and the first floor sample at 23 Tufts Street were significantly higher than previously measured. Based on these concentrations and an initial Imminent Hazard Evaluation, UniFirst reported to DEP on August 1, 2006, the potential for an Imminent Hazard at 23 Tufts Street. DEP assigned RTN 3-26114 to the release.

GEI collected additional air samples in the basements and first floor of 23 and 27 Tufts Street on August 3, 2006, to confirm the original test results and further evaluate the potential for an Imminent Hazard. PCE concentrations in samples collected in the August 2006 samples were significantly lower than those collected in June 2006. Based on the additional data and an updated Imminent Hazard Evaluation, UniFirst retracted the Imminent Hazard Notification as documented in our letter dated September 21, 2006. In their letter of October 11, 2006, DEP disputed the retraction and required an IRA Plan to be submitted by November 10, 2006.

GEI collected third quarter 2006 air samples at 11/13 and 27 Tufts Street on September 28, 2006; at 9, 17, 19, 23, and 25 Tufts Street on October 2, 2006; and at 19 Tufts Street on October 10, 2006. Chemical testing results were unavailable for inclusion in this IRA Status Report No. 2, but will be included in a future submittal to DEP.

Air Purifiers

UniFirst offered to install an air purifier in each of the seven residences evaluated along Tufts Street while additional investigation proceeds. The air purifiers were installed at 9, 11/13, 17, 23, 25, and 27 Tufts Street. The owners of 19 Tufts Street are still considering whether they want an air purifier to be installed.

Subsurface Investigations

In April and May 2006, GEI oversaw the installation of 5 monitoring wells (MW101 through MW105) in the vicinity of the Site. Selected soil samples were collected from the borings and submitted for chemical testing for VOCs. VOCs were detected in at least one soil sample from borings MW101 through MW104, but were not detected in soil samples from boring MW105.

GEI collected groundwater samples from the five newly installed monitoring wells and 12 existing monitoring wells and submitted them for chemical analysis of VOCs. PCE was detected in 16 of the samples at concentrations above the Massachusetts Contingency Plan (MCP) Method 1 groundwater standard GW2. Elevated concentrations of PCE were detected in the newly installed wells along Morton Street, one block north of 50 Tufts Street.

In October 2006, GEI collected groundwater samples from 14 of the 17 monitoring wells sampled in May 2006. Chemical testing results were unavailable at the time of the submittal of this IRA Status Report No. 2. However, we will include the results in a future report to DEP.

IRA Modification

Based on the PCE concentrations in groundwater in the newly installed wells located on Morton Street measured in May and August 2006, and the concentrations of PCE measured in indoor air samples, we are amending the IRA Plan dated January 9, 2006, to include:

- Installing and sampling additional groundwater monitoring wells.
- Collecting soil gas samples at selected groundwater monitoring well locations.
- Performing monthly groundwater-level gauging in existing and proposed monitoring wells.
- Collecting additional outdoor air samples in the vicinity of the Site.

1. Introduction

On behalf of UniFirst Corporation of Wilmington, Massachusetts, GEI Consultants, Inc. prepared this Immediate Response Action (IRA) Status Report No. 2 and Plan Modification. The work was conducted as part of IRA activities for the site located at 50 Tufts Street in Somerville, Massachusetts (the Site) (Fig. 1). Based on the results of assessments conducted to date, the Site includes the 50 Tufts Street property (the Property), together with portions of properties located across that public street to the east of the Property. The Property is approximately 51,111 square feet and developed with an approximately 20,594-square-foot, one-story, masonry block building. The majority of the building is warehouse space and a small portion is office space.

The purpose of the Status Report No. 2 is to provide the results of subsurface investigations in the vicinity of the Site, and indoor air sampling conducted at residential properties along Tufts Street between March and October 2006. The scope of the IRA Plan Modification is to:

- Install and sample additional groundwater monitoring wells.
- Collect soil gas samples at selected monitoring well locations.
- Perform monthly groundwater-level gauging in existing and proposed monitoring wells.
- Collect additional outdoor air samples in the vicinity of the Site

1.1. Background

The Massachusetts Department of Environmental Protection (DEP) assigned Release Tracking Numbers (RTNs) 3-23246, 3-24358, and 3-24376 to reported releases associated with the Site. The Site is currently classified as Tier IC. The RTNs for the Site were consolidated under RTN 3-23246 at the time the Tier I C permit application was submitted to DEP on June 16, 2006.

Previous submittals by UniFirst that document IRA activities at the Site since January 2006 include:

- IRA Plan, 50 Tufts Street, Somerville, Massachusetts, dated January 9, 2006.
- IRA Status Report No. 1, 50 Tufts Street, Somerville, Massachusetts, dated May 9, 2006.
- Phase I, Initial Site Investigation, and Tier Classification, 50 Tufts Street, Somerville, Massachusetts, dated June 16, 2006.
- Interim IRA Status Report and IRA Plan Modification, 50 Tufts Street, Somerville, Massachusetts, dated June 27, 2006.
- "Imminent Hazard Retraction, 50 Tufts Street, Somerville, Massachusetts, RTN 3-26114," dated September 21, 2006.

- “IRA Plan Modification, 50 Tufts Street, Somerville, Massachusetts, RTNs 3-23246,” dated September 21, 2006.

A detailed Site description and a summary of the history of releases and response actions conducted at the Site are documented in UniFirst’s IRA Plan and IRA Status Report No. 1.

Imminent Hazard Notification

UniFirst conducted the second quarter 2006 indoor air sampling in the homes being evaluated along Tufts Street in June 2006. The PCE concentrations in the basement samples of 23 and 27 Tufts Street and the first floor sample at 23 Tufts Street were significantly higher than previously measured. Based on these concentrations and an initial Imminent Hazard Evaluation, UniFirst reported to DEP on August 1, 2006, the potential for an Imminent Hazard at 23 Tufts Street. DEP assigned RTN 3-26114 to the release. Based on additional data and an updated Imminent Hazard Evaluation, UniFirst retracted the Imminent Hazard Notification, as documented in our letter dated September 21, 2006. In their letter of October 11, 2006, DEP disputed the retraction and required an IRA Plan to be submitted by November 10, 2006.

1.2. Contact Information

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1.3. Purpose

The purpose of this submittal is to:

- Provide the results of the subsurface investigation conducted in the spring of 2006.
- Provide the results of second quarter (June/July) indoor air sampling conducted at residences along Tufts Street.
- Provide results of additional indoor air sampling conducted at residences along Tufts Street on August 3, 2006.
- Document the third quarter (September/October) indoor air sampling at residences along Tufts Street.
- Document the third quarter (October) groundwater sampling from monitoring wells at and in the vicinity of 50 Tufts Street.

- Document the installation of air purifiers in homes under evaluation along Tufts Street.
- Modify the IRA Plan originally submitted on January 9, 2006.

1.4. Submittals

The IRA Transmittal Form (BWSC105) was submitted by eDEP on November 10, 2006 and a copy is in Appendix A.

2. Summary of Indoor Air Sampling

2.1. Second Quarter Sampling (June and July 2006)

GEI collected samples on June 28 and 29, 2006, at 11/13, 19, 23, and 27 Tufts Street, but we were unable to obtain access at that time to sample at 9, 17, and 25 Tufts Street. Air sampling locations are shown in Figure 2. We subsequently sampled 9 Tufts Street on July 24, 2006, and 25 Tufts Street on August 1, 2006. After numerous attempts to contact the residents at 17 Tufts Street, we were unable to obtain access to that residence during the second quarter 2006 sampling round. Air sampling locations are shown in Figure 3.

2.2. Additional Sampling (August 2006)

PCE concentrations measured in the June 2006 basement samples of 23 and 27 Tufts Street, and the first floor sample at 23 Tufts Street were significantly higher than previously measured. Consequently, we collected additional samples at 23 and 27 Tufts Street on August 3, 2006, to confirm the June sampling results and further evaluate the potential for an Imminent Hazard.

2.3. Third Quarter Sampling (October 2006)

GEI collected quarterly air samples on September 28, 2006 at 11/13 and 27 Tufts Street. We sampled 9, 17, 23, and 25 Tufts Street on October 2, 2006. We were unable to obtain access at that time to 19 Tufts Street, which we subsequently sampled on October 10, 2006.

2.4. Work Plan and Quality Assurance Project Plan

The air sampling was conducted in general conformance with the project Work Plan and Quality Assurance Project Plan (QAPP). The Work Plan and QAPP specify general sampling and data evaluation protocols and procedures to be followed during the program in order to achieve the data usability objectives of the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000). Copies of the Work Plan and the QAPP were provided in IRA Status Report No. 1. Excursions from the Work Plan and QAPP are summarized in Table 1, and are summarized below.

The majority of the deviations from the QAPP are not significant and only involved documentation of the sampling (e.g., no photos were taken following the completion of the air sampling). During the September/October 2006 sampling round, the air sampling was stopped at five locations prior to the internal pressure of the canister being in the QAPP specified range (0.5 to 5.0 in-Hg). The laboratory replaces the remaining vacuum in the Summa canister with an inert gas (nitrogen). This process results in a dilution of the sample and sometimes elevated method detection limits.

During the September/October 2006 sampling round, four of the five air samples were completed before reaching the specified pressure range due to access constraints related to the residents. However, the internal Summa canister pressure was near the specified range (refer to Table 1). The internal pressure at the end of sampling associated with 045162-19Tufts-B was 20 in-Hg, and is believed to be associated with an obstruction in the intake pipe during sampling.

2.5. Indoor Air Sampling - Pre-Sampling Survey

Due to access constraints related to the residents, GEI did not conduct a detailed pre-sampling survey during the June through October 2006 indoor air sampling events and no materials were removed from the residences prior to sampling. However, to the extent practicable within those constraints, GEI noted chemicals of concern or materials in plain view that may potentially be off-gassing analytes that are being tested for in the samples, and recorded these observations on the pre-sampling checklists described below.

2.6. Air Sampling

2.6.1. *Air Sampling – Checklist and Methods*

Air samples were collected in general conformance with the Work Plan and QAPP. Air samples were collected using polished stainless-steel evacuated canisters (Summa canisters) and regulators provided by Accutest Laboratories (Accutest) of Marlborough, Massachusetts. Each canister was certified clean by Accutest, and copies of the certifications are in Appendix B.

Sampling equipment was placed in the sampling location after completing an Ambient Air Sampling Checklist. Copies of the completed checklists are in Appendix C.

The regulator was attached to the canister at the location of the testing, and the pressure gauge reading was recorded. The canister was elevated so that the “candy cane” air inlet was approximately 3 to 5 feet above the floor. The canister position in the room was photographed. Copies of photographs are in Appendix C. The laboratory set flow regulator was subsequently turned on and the time recorded. The regulator was turned off after approximately four hours, and the time and final pressure gauge reading recorded. Photographs of the canisters were not taken at the completion of sampling because, in general, the residents expressed concern about their homes being photographed.

2.6.2. *Air Sampling – Locations and Duplicates*

The locations of air samples collected in June through August 2006, and September and October 2006 at the residences and exterior sample locations are shown in Figures 2 and 3, respectively.

Duplicate air samples were collected in the basement at 19 Tufts Street on June 29, 2006, and October 10, 2006, and in the basement at 17 Tufts Street on October 2, 2006. The duplicate air

sample was created by using a “T-splitter” and tubing attached to both canisters, so that both canisters were drawing from the same port.

The duplicate sample was submitted “blind” to the laboratory in accordance with the QAPP. In general, the purpose of the duplicate is to evaluate the ability of the laboratory to accurately replicate testing results.

2.6.3. Air Sampling - Exterior Samples (June through August)

A total of four exterior air samples was collected during the air sampling event.

One exterior air sample (045160-Tufts-O-1A) canister was attached to a tree in front of 17 Tufts Street (Fig. 2) on June 28, 2006. GEI personnel watched the canister intermittently throughout the 4-hour collection period to prevent tampering. A second sample (045160-Tufts-O-2A) was collected at the same location the next day, June 29, 2006.

One exterior air sample (045160-Tufts-O-1B) canister was attached to the fence on the northeast corner of the Property (Fig. 2) on June 28, 2006. GEI personnel watched the canister intermittently throughout the 4-hour collection period to prevent tampering. A second sample (045160-Tufts-O-2B) was collected at the same location the next day, June 29, 2006.

The exterior air samples were collected to evaluate the ambient exterior air conditions.

2.6.4. Air Sampling - Exterior Samples (September and October 2006)

A total of eight exterior air samples was collected during the air sampling event.

One exterior air sample (045162-Tufts-O-1A) canister was attached to a tree directly in front of 17 Tufts Street (Fig. 3) on September 28, 2006. GEI personnel watched the canister intermittently throughout the 4-hour collection period to prevent tampering. A second sample (045160-Tufts-O-1B) was collected at the same location on the second day of sampling, October 2, 2006.

One exterior air sample (045162-Tufts-O-2A) canister was attached to a fence on the northeast corner of the Property (Fig. 3) on September 28, 2006. GEI personnel watched the canister intermittently throughout the 4-hour collection period to prevent tampering. A second sample (045160-Tufts-O-2B) was collected at the same location on the second day of sampling, October 2, 2006.

Four exterior ambient air samples (045162-Tufts-O-3A, 045162-Tufts-O-4A, 045162-Tufts-O-5A, and 045162-Tufts-O-6A) were collected at various locations surrounding the Property (Fig. 3) on October 2, 2006. They were located on Cross Street, Alston Street, the corner of Hadley Court and Franklin Street, and Knowlton Street, respectively.

The exterior air samples were collected to evaluate ambient air conditions.

2.6.5. Air Sampling - Trip Blank

A trip blank sample was submitted for laboratory analysis to confirm that volatile organic compound (VOC) contamination of the sampling vessels did not occur during the transport of the canisters to and from the sampling site and the laboratory. The trip blank was left at each of the sampling locations for a small amount of time so that each location would be represented. The trip blank was also transported with the other Summa canisters that were used to sample indoor and outdoor air. It was partially filled with inert clean gas upon return to the laboratory and then analyzed for VOCs using the U.S. Environmental Protection Agency (EPA) TO-15 method.

2.7. Meteorological Conditions

2.7.1. Meteorological Conditions (June, July, and August 2006)

During the air sampling on June 28 and 29, 2006, outdoor meteorological measurements were made with a Vantage Pro portable weather station. Weather conditions on July 24, August 1 and 3, 2006, are based on observations and meteorological data from the weather station at Logan Airport.

On June 28, 2006, the first day of sampling, the outdoor temperature during sampling ranged from 73 degrees Fahrenheit (°F) to 77°F. Wind direction was toward the northeast throughout the day. Barometric pressure was measured to be 30.27 inches of mercury (in-Hg) when sampling commenced in the morning, and 30.20 in-Hg and 30.17 in-Hg at Tufts-O-1A and Tufts-O-1B, respectively, at the time of sampling completion.

Throughout the second day of sampling, June 29, 2006, the outdoor temperature ranged from 78°F to 80°F. Wind direction kept steady heading to the northeast. Barometric pressure was measured to be 30.12 in-Hg when sampling commenced in the morning and 30.09 in-Hg at the time of sampling completion.

The temperature and barometric pressure on June 29 (74 °F, 29.98 in-Hg), July 24 (74 °F, 29.92 in-Hg), August 1 (86°F), and August 3 (81 °F) are from the weather station at Logan Airport.

There were no known precipitation events at the Site for at least 12 hours preceding the sampling in June, July, and August 2006. However, there was a drizzle during the last 20 and 48 minutes of sampling at Tufts-O-1A and Tufts-O-1B, respectively, on June 28, 2006.

2.7.2. Meteorological Conditions (September and October 2006)

During the air sampling, meteorological measurements were made with a Vantage Pro portable weather station on October 2, 2006, and with a handheld thermometer and barometer on September 28 and October 10, 2006.

On September 28, 2006 (the first day of sampling), the outdoor temperature was measured to be 74.3 degrees Fahrenheit (°F) when sampling commenced in the morning and 73.2 °F at the time of sampling completion. Wind direction kept steady heading west. Barometric pressure was measured to be 30.03 in-Hg when sampling commenced in the morning and 30.02 in-Hg at the time of sampling completion.

On October 2, 2006 (the second day of sampling), the outdoor temperature was measured to be 54°F when sampling commenced in the morning and 64°F at the time of sampling completion. Wind direction kept steady heading southeast. Barometric pressure was measured to be 30.01 in-Hg when sampling commenced in the morning and 29.99 in-Hg at the time of sampling completion.

On October 10, 2006 (the third and final day of sampling), the outdoor temperature was measured to be 69 F when sampling commenced in the morning and 68°F at the time of sampling completion. The wind was minimal to non existent during the sampling period. Barometric pressure was measured to be 30.11 in-Hg when sampling commenced in the morning and 30.10 in-Hg at the time of sampling completion.

There were no precipitation events during or for at least 12 hours proceeding the sampling periods.

2.8. Indoor Air Chemical Testing

The air samples were submitted to Accutest for chemical testing by EPA Method TO-15. The EPA method TO-15 was modified to report the same analytes reported by DEP during the indoor air testing conducted in 2005:

| | |
|----------------------------|---------------------------|
| Chloroethane | cis-1,2-Dichloroethylene |
| Chloroform | Methylene Chloride |
| Chloromethane | 1,1,1-Trichloroethane |
| Carbon Tetrachloride | 1,1,2,2-Tetrachloroethane |
| 1,1-Dichloroethane | 1,1,2-Trichloroethane |
| 1,1-Dichloroethylene | Tetrachloroethylene (PCE) |
| 1,2-Dichloroethane | Trichloroethylene (TCE) |
| trans-1,2-Dichloroethylene | Vinyl Chloride |

For samples collected after July 31, 2006, the analyte list was modified to remove methylene chloride because this compound was consistently detected in laboratory blanks and is not associated with the Site. Chloroform and chloromethane were also removed from the analyte list for these samples, because these compounds are not associated with the Site.

3. Subsurface Investigation

3.1. Previous Subsurface Investigations

Previous subsurface investigations at the Site have included:

- In 2002, on behalf of Mr. Francis Margaglione, a prospective purchaser of the Property, Sanborn Head & Associates conducted an environmental due diligence investigation on the Property. SHA performed a subsurface exploration program consisting of the advancement of ten soil borings (SH-1 through SH-5, SH-B1, SH-B2, and SH-MW1 through SH-MW3), the installation of eight monitoring wells (SH-1 through SH-5, and SH-MW1 through SH-MW3), and the collection of soil and groundwater samples for laboratory analyses of VOCs (Fig. 4).
- In August 2004, on behalf of Atlantic National Trust, LLC, GeoInsight performed subsurface investigations at the Site consisting of the installation of two monitoring wells (GEO-1 and GEO-2) on the northern portion of the Property, four monitoring wells (GEO-3 through GEO-6) on the eastern side of Tufts Street and two soil borings (Soil Boring-1 and Soil Boring-2) on the southern portion of the Property (Fig. 4). Groundwater was collected for laboratory analyses of VOCs.

Available information regarding these subsurface investigations was presented in the Phase I Report.

3.2. Soil Boring and Monitoring Well Installation

On April 27 and 28, 2006, GEI observed Geosearch, Inc. of Fitchburg, Massachusetts (Geosearch) vacuum excavate four soil boring locations; MW101, MW102, MW103, and MW105 to depths between 6.5 and 9.5 feet (Fig. 4).

On May 1 and 2, 2006, GEI observed Geosearch advance four hollow-stem auger soil borings, and install four 2-inch-diameter monitoring wells in previously vacuum excavated locations (MW101, MW102, MW103, and MW105) at the Site. Geosearch advanced MW102 and MW103 to 16 feet, MW101 to 19 feet, and MW105 to 29 feet.

On May 17, 2006, Geosearch advanced one Geoprobe® boring (MW104) in the grass near the intersection of Washington Street and Tufts Street to avoid utilities located along Washington Street. The boring was advanced to a depth of approximately 15 feet and completed as a 2-inch-diameter monitoring well.

Boring locations are shown in Figure 4. Boring logs and monitoring well installation reports are in Appendix D. The locations and elevations of the existing monitoring wells shown in Figure 4 were surveyed by BSC Group of Boston, Massachusetts.

3.3. Soil Sampling

During vacuum excavation activities in April 2006, GEI collected soil samples from each boring location at depths of approximately 2 to 3 feet using a hand auger. The soil samples were screened for VOCs, using a photoionization detector (PID) and the jar headspace method, and were submitted to Accutest for chemical analysis of VOCs.

GEI collected continuous soil samples during hollow-stem auger and Geoprobe® drilling in May 2006. GEI screened the samples in the field for VOCs using the jar headspace method and submitted selected samples to Accutest for chemical analysis of VOCs.

3.4. Groundwater Level Measurements

GEI measured groundwater levels site-wide in May and October 2006 prior to groundwater sampling, and at selected locations during the period July through September 2006.

Groundwater level measurements from May to October 2006 are in Table 2.

3.5. Groundwater Sampling (May 2006)

From May 23 through 25, 2006, GEI collected groundwater samples from 12 existing monitoring wells and five monitoring wells installed by GEI in May 2006. Groundwater samples were collected using low-flow sampling techniques. Monitoring wells MW-2 and SH-1 were dry during the sampling event. Monitoring wells SH-2, SH-3, SH-4, and SH-5 did not have sufficient water to be able to collect groundwater samples using either low-flow methods or Teflon bailers. Groundwater samples were submitted to Accutest for chemical analysis of VOCs.

3.6. Additional Groundwater Sampling (August 2006)

GEI collected an additional groundwater sample from MW103 on August 7, 2006. The sample was collected using the low-flow sampling technique and was submitted to Accutest for chemical analysis of VOCs.

3.7. Groundwater Sampling (October 2006)

On October 4 and 5, 2006, GEI collected groundwater samples from nine existing monitoring wells and five monitoring wells installed by GEI in May 2006. Groundwater samples were collected using low-flow sampling techniques, except for MW105. Monitoring well MW105 was sampled by Teflon bailer because there was not sufficient water to be able to use the low-flow technique. Monitoring well MW-2 was not located during the sampling event and is

presumed destroyed. Monitoring wells MW-1, MW-3, SH-1, SH-3, and SH-5 were dry during the sampling event. Monitoring wells SH-2 and SH-4 did not have sufficient water to be able to collect groundwater samples using either low-flow methods or Teflon bailers. Groundwater samples were submitted to Accutest for chemical analysis of VOCs.

4. Chemical Testing Results

4.1. Air Chemical Testing Results

4.1.1. Air Chemical Testing Results (June, July, and August 2006)

GEI collected air samples from four residences (11/13, 19, 23, and 25 Tufts Street) and at two outdoor locations on June 28 and 29, 2006, quarterly sampling round. We collected samples at 9 and 25 Tufts Street on July 24 and August 1, 2006, respectively. We collected additional samples at 23 and 27 Tufts Street on August 3, 2006. The March, June, July, and August 2006 indoor air chemical testing results are summarized in Table 3 along with the results of DEP's indoor air sampling conducted in 2005. A summary table of PCE concentrations in indoor air samples is in Table 4. Outdoor air chemical testing results are summarized in Table 5. The laboratory data report is in Appendix B.

Carbon tetrachloride, chloroform, chloromethane, 1,2-dichloromethane, methylene chloride, PCE, 1,1,1-trichloroethane, and TCE were detected in at least one of the indoor air samples. However, of these compounds, only PCE and TCE have been associated with environmental conditions at the Site. Carbon tetrachloride, chloromethane methylene chloride, PCE, 1,1,1-trichloroethylene, and TCE were detected in at least one of the outdoor air samples. The concentrations of methylene chloride in both the indoor and outdoor samples were attributed to laboratory contamination because methylene chloride was detected in the laboratory blank.

Higher concentrations of PCE in indoor air were detected in the first floors at 11/13, 19, 23, and 27 Tufts Street and in the basements at 11/13, 23, and 27 Tufts Street in the June 2006 samples than those collected in March 2006. At 9, 11/13, 19, and 25 Tufts Street, the differences in concentrations from March to June 2006 were not substantial.

However, PCE concentrations in the basement samples of 23 and 27 Tufts Street and the first floor sample at 23 Tufts Street were significantly higher than previously measured. Based on these concentrations, UniFirst reported to DEP on August 1, 2006, the potential for an Imminent Hazard at 23 Tufts Street. DEP assigned RTN 3-26114 to the condition. In addition to further evaluating conditions at 23 Tufts Street, UniFirst proposed to also evaluate conditions at 27 Tufts Street. The IRA activities approved by DEP for 23 and 27 Tufts Street were to:

- Resample 23 and 27 Tufts Street as soon as practicable to confirm the June 2006 data, and re-evaluate the persistence of an Imminent Hazard condition.
- Install air purifiers in the basements at 23 and 27 Tufts Street as a temporary mitigative measure while additional investigation proceeds.

Following the collection of additional data and an updated Imminent Hazard Evaluation, UniFirst retracted the Imminent Hazard Notification as documented in our letter dated September 21, 2006. In their letter of October 11, 2006, DEP disputed the retraction and required an IRA Plan to be submitted by November 10, 2006.

4.1.2. Air Chemical Testing Results (September and October 2006)

Results from the September and October 2006 air sampling events are not yet available, but will be included in a future submittal to DEP.

4.2. Soil Chemical Testing Results (April and May 2006)

Soil chemical testing results are summarized in Table 6 along with soil data from previous investigations. The laboratory data report associated with the April and May 2006 soil chemical testing is in Appendix E.

Several analytes including 1,1-dichloroethane, cis-1,2-dichloroethene, ethylbenzene, PCE, 1,1,1-trichloroethane, TCE, and m,p-, and o-xylenes were detected in the April and May 2006 soil samples. None of the samples exceeded the MCP Method 1 S1/GW-2 standards for these analytes. Low concentrations of PCE, associated with environmental conditions at the Site, were detected in MW101-S1, MW101-S5, and MW101-S6; MW102-S5; MW103-S6; and MW104-S1 and MW104-S2.

4.3. Groundwater Chemical Testing Results

4.3.1. Groundwater Chemical Testing Results (May and August 2006)

Groundwater chemical testing results are summarized in Table 7 along with groundwater data from previous investigations. The laboratory data reports associated with the May and August 2006 groundwater chemical testing are in Appendix F.

In May 2006, GEI sampled 17 existing groundwater monitoring wells at the Site; and monitoring wells, MW101, MW102, MW103, MW104, and MW105, installed by GEI in May 2006.

Several VOC compounds, listed in Table 7, were detected in at least one groundwater sample from the May 2006 sampling event. PCE was detected in all samples, and TCE was detected in all samples except for MW105. PCE concentrations exceed the MCP Method 1 GW-2 standard in each monitoring well except MW105, while TCE concentrations exceeded the GW-2 standard in each well except for MW102, MW105, GEO-2, and GEO-3. Other VOCs that exceeded the GW-2 standard in at least one sample included carbon tetrachloride, 1,1,-dichloroethane, cis-1,2-dichloroethane, 1,1,1-trichloroethane, and vinyl chloride.

PCE concentrations decreased in SH-MW1, SH-MW-2, SH-MW-3, GEO-2, GEO-3, GEO-4, GEO-5, and GEO-6, but increased in MW-1, MW-3, and GEO-1. TCE concentrations decreased in SH-MW2, SH-MW3, GEO-2, GEO-3, GEO-4, GEO-5, and GEO-6, but increased in MW-1 and GEO-1.

On August 7, 2006, we re-sampled MW103 to confirm results obtained from the May 2006 sampling event. The PCE concentration detected in the MW103 decreased from 2,600 to 592 micrograms/liter [$\mu\text{g/L}$] between May and August 2006.

4.3.2. Groundwater Chemical Testing Results (October 2006)

Results from the October quarterly groundwater sampling event were not yet available at the time of this submittal. The results will be included in a future submittal to DEP.

5. Investigation Derived Waste

TMC Services, Inc. (TMC) of Bellingham, Massachusetts, transported drill cuttings generated from soil borings and purge water generated from groundwater monitoring well development and sampling off-site to licensed hazardous waste facilities. TMC transported drill cuttings from the May 2006 subsurface investigation to General Chemical Corp. located at 133-138 Leland Street in Framingham, Massachusetts; purge water from the May 2006 groundwater sampling round to Jones Environmental Services (New England), Inc. located at 263 Howard Street in Lowell, Massachusetts; and purge water from the October 2006 groundwater sampling to Northland Environmental, Inc. located at 275 Allens Avenue in Providence, Rhode Island. Copies of the Hazardous Waste Manifests are in Appendix G.

6. IRA Modification

6.1. IRA Plan Modification No. 2 (September 2006)

UniFirst offered to install an air purifier in each of the seven residences evaluated along Tufts Street while additional investigation proceeds. UniFirst submitted an IRA Plan Modification No. 2 to DEP under RTN 3-23246 on September 21, 2006. The objective of the IRA Plan Modification No. 2 was to:

- Install an air purifier in each of the seven residences evaluated along Tufts Street as a temporary mitigative action while additional investigation proceeds.

The AllerAir 5000 Vocab air purifier is designed for the removal of VOCs. The air purifiers were installed at 9, 11/13, 17, 23, 25, and 27 Tufts Street immediately following the indoor air sampling on September 28 or October 2, 2006. The owner of 19 Tufts Street is still considering installation of the air purifier.

6.2. Planned IRA Activities

To continue to evaluate the extent of the shallow groundwater plume and the potential for associated soil gas vapor, we are amending the IRA Plan dated January 9, 2006, to:

- Install and sample additional groundwater monitoring wells.
- Collect soil gas samples at selected groundwater monitoring wells.
- Perform monthly groundwater-level gauging in existing and proposed monitoring wells.
- Collect additional outdoor air samples in the vicinity of the Site.

The objectives of the IRA modification are to:

- Continue to evaluate the extent of the shallow groundwater plume.
- Correlate soil gas concentrations to groundwater concentrations.
- Evaluate the variability in depth to groundwater and groundwater contours.
- Evaluate the background levels of chlorinated VOCs in outdoor ambient air in the vicinity of the Site.

6.2.1. Soil Boring and Groundwater Monitoring Wells

GEI will engage a drilling subcontractor to install up to seven monitoring wells to depths of approximately 20 feet using a hollow-stem auger drill rig at the approximate locations shown in Figure 4. Each soil boring will be completed as a 2-inch-diameter monitoring well. Soil samples

from each boring will be screened during drilling, and selected soil samples will be submitted to Accutest for chemical testing for VOCs.

We anticipate installing the wells on public property (e.g., sidewalks and roads). We will apply for a Grant of Location from the City, followed by a street opening permit.

We will collect one round of groundwater samples as selected from the 21 existing wells and the seven proposed wells. The wells will be sampled using low-flow sampling methods. Samples will be submitted to Accutest for chemical analysis of VOCs by EPA Method 8260B. Prior to sampling, we will gauge each well for potential non-aqueous phase liquid (NAPL) and for depth to groundwater.

6.2.2. Soil Gas Survey Sampling Points

We will collect a soil gas sample from selected existing and proposed groundwater monitoring wells. Each soil gas sample will be collected over a 1-hour period in a Summa canister and will be analyzed by EPA Method TO-15.

6.2.3. Groundwater Gauging

We will measure the depth to water in the existing and proposed monitoring wells at the Site, including wells on the Property, monthly from August to December 2006. We will also install data loggers in three existing wells to continuously measure depth to groundwater.

6.2.4. Outdoor Air Sampling

We will collect additional outdoor air samples in the vicinity of the Site in the fall of 2006 to evaluate background levels of contaminants in ambient air. Each outdoor air sample will be collected over a 4-hour period in a Summa canister and will be analyzed by EPA Method TO-15.

6.2.5. Soil Gas Sampling

The soil gas samples will be submitted to Accutest and analyzed by EPA Method TO-15.

The laboratory will be asked to report the following compounds:

| | | |
|----------------------|----------------------------|-----------------------|
| Chloroethane | Trans-1,2-Dichloroethylene | 1,1,2-Trichloroethane |
| Carbon Tetrachloride | Cis-1,2-Dichloroethylene | Tetrachloroethylene |
| 1,1-Dichloroethane | 1,1,1-Trichloroethane | Trichloroethylene |
| 1,1-Dichloroethylene | 1,1,2,2-Trichloroethane | Vinyl Chloride |
| 1,2-Dichloroethane | | |

7. Limitations

This IRA Status Report No. 2 and Plan Modification No. 3 was prepared for the use of UniFirst Corporation, exclusively. The conclusions presented in this report are based solely on the information reported in this document. Additional information regarding the Site and surrounding area not available to GEI may result in a modification of the findings herein. This report has been prepared in accordance with generally accepted geohydrological practices. No warranty, expressed or implied, is made.



Geotechnical
Environmental and
Water Resources
Engineering



Table 1
QAPP Deviations
50 Tufts Street
Somerville, MA

| Sampling Period | Address | Sample ID | Deviation from QAPP |
|-------------------------|---------------------|--|--|
| June, July, August 2006 | 9 Tufts Street | 045160-9Tufts-1L 045160-9Tufts-1R 045160-9Tufts-BR | <ul style="list-style-type: none"> Photographs not taken at end of sample period. Modified pre-sampling survey completed prior to collection of sample. Possible contaminant sources not removed. PID readings not taken at end of sample period. |
| | 11/13 Tufts Street | 045160-11/13Tufts-1 045160-11/13Tufts-B | <ul style="list-style-type: none"> Photographs not taken at end of sample period. Modified pre-sampling survey completed prior to collection of sample. Possible contaminant sources not removed. PID readings not taken at end of sample period. |
| | 17 Tufts Street | 045160-17Tufts-1 045160-17Tufts-B 045160-17Tufts-C | NT |
| | 19 Tufts Street | 045160-19Tufts-1 045160-19Tufts-B 045160-19Tufts-C | <ul style="list-style-type: none"> Photographs not taken at end of sample period. Modified pre-sampling survey completed prior to collection of sample. Possible contaminant sources not removed. PID readings not taken at end of sample period. |
| | 23 Tufts Street | 045160-23Tufts-1 045160-23Tufts-B | <ul style="list-style-type: none"> Photographs not taken at end of sample period. Modified pre-sampling survey completed prior to collection of sample. PID readings not taken at end of sample period. Basement sample air intake was at 5.5'. The canister was placed at the most appropriate location, which was slightly higher than the 3-5' location that it was supposed to be. |
| | 25 Tufts Street | 045160-25Tufts-1 045160-25Tufts-B | <ul style="list-style-type: none"> Photographs not taken at end of sample period. Modified pre-sampling survey completed prior to collection of sample. PID readings not taken at end of sample period. |
| | 27 Tufts Street | 045160-27Tufts-1 045160-27Tufts-B | <ul style="list-style-type: none"> Photographs not taken at end of sample period. Modified pre-sampling survey completed prior to collection of sample. Possible contaminant sources not removed. PID readings not taken at end of sample period. |
| | Outdoor Air Samples | 045160-Tufts-O1a 045160-Tufts-O1b 045160-Tufts-O2a 045160-Tufts-O2b | <ul style="list-style-type: none"> Photographs not taken at end of sample period. PID readings not taken for outdoor samples. |

Table 1
QAPP Deviations
 50 Tufts Street
 Somerville, MA

| Sampling Period | Address | Sample ID | Deviation from QAPP |
|--|--------------------|--|---|
| August 2006 (Additional Sampling Round) | 23 Tufts Street | 04516-23Tufts-1 04516-23Tufts-B | <ul style="list-style-type: none"> Photographs not taken at end of sample period. Modified pre-sampling survey completed prior to collection of sample. PID readings not taken at end of sample period. |
| | 27 Tufts Street | 04516-27Tufts-1 04516-27Tufts-B | <ul style="list-style-type: none"> Photographs not taken at end of sample period. Modified pre-sampling survey completed prior to collection of sample. Possible contaminant sources not removed. PID readings not taken at end of sample period. |
| | 9 Tufts Street | 045162-9Tufts-1L 045162-9Tufts-1R 045162-9Tufts-BR | <ul style="list-style-type: none"> Photographs not taken at end of sample period. Modified pre-sampling survey completed prior to collection of sample. Possible contaminant sources not removed. PID readings not taken at end of sample period. Sample 045162-9Tufts-1R was stopped when internal pressure only read 6 in-Hg due to access constraints. Sample 045162-9Tufts-BR was stopped when internal pressure only read 6 in-Hg due to access constraints. |
| September, October 2006 | 11/13 Tufts Street | 045162-11/13Tufts-1 045162-11/13Tufts-B | <ul style="list-style-type: none"> Photographs not taken at end of sample period. Modified pre-sampling survey completed prior to collection of sample. Possible contaminant sources not removed. PID readings not taken at end of sample period. |
| | 17 Tufts Street | 045162-17Tufts-1 045162-17Tufts-B 045162-17Tufts-C | <ul style="list-style-type: none"> Photographs not taken at end of sample period. Modified pre-sampling survey completed prior to collection of sample. Possible contaminant sources not removed. PID readings not taken at end of sample period. |
| | 19 Tufts Street | 045162-19Tufts-1 045162-19Tufts-B 045162-19Tufts-C | <ul style="list-style-type: none"> Photographs not taken at end of sample period. Modified pre-sampling survey completed prior to collection of sample. Possible contaminant sources not removed. PID readings not taken at end of sample period. Sample 045162-19Tufts-B was stopped when internal pressure only read 20 in-Hg. There may have been an obstruction slowing the air going into the canister. Sample 045162-19Tufts-C was stopped when internal pressure only read 8 in-Hg due to access constraints. |

Table 1
QAPP Deviations
50 Tufts Street
Somerville, MA

| Sampling Period | Address | Sample ID | Deviation from QAPP |
|-------------------------|---------------------|-------------------|---|
| September, October 2006 | 23 Tufts Street | 045162-23Tufts-1 | <ul style="list-style-type: none"> Photographs not taken at end of sample period. |
| | | 045162-23Tufts-B | <ul style="list-style-type: none"> Modified pre-sampling survey completed prior to collection of sample. Possible contaminant sources not removed. PID readings not taken at end of sample period. Sample 045162-23Tufts-1 was stopped when internal pressure only read 6 in-Hg due to access constraints. |
| | 25 Tufts Street | 045162-25Tufts-1 | <ul style="list-style-type: none"> Photographs not taken at end of sample period. |
| | | 045162-25Tufts-B | <ul style="list-style-type: none"> Modified pre-sampling survey completed prior to collection of sample. Possible contaminant sources not removed. PID readings not taken at end of sample period. |
| | 27 Tufts Street | 045162-27Tufts-1 | <ul style="list-style-type: none"> Photographs not taken at end of sample period. |
| | | 045162-27Tufts-B | <ul style="list-style-type: none"> Modified pre-sampling survey completed prior to collection of sample. Possible contaminant sources not removed. PID readings not taken at end of sample period. |
| | Outdoor Air Samples | 045162-Tufts-O-1A | <ul style="list-style-type: none"> Photographs not taken at end of sample period. |
| | | 045162-Tufts-O-1B | <ul style="list-style-type: none"> PID readings not taken for outdoor samples. |
| | | 045162-Tufts-O-2A | |
| | | 045162-Tufts-O-2B | |
| | | 045162-Tufts-O-3A | |
| | | 045162-Tufts-O-4A | |
| | | 045162-Tufts-O-5A | |
| | | 045162-Tufts-O-6A | |

Table 2
Summary of Monitoring Wells and Groundwater Elevations
50 Tufts Street
Somerville, MA

| Location Name | Well Screen Interval (feet bgs) | Elevation of Top of PVC (feet NGVD) | 5/15/06 | | 5/16/06 | | 5/23/06 | | 5/31/06 | | 7/24/06 | |
|---------------|------------------------------------|--|--------------------------------|---|--------------------------------|---|--------------------------------|---|--------------------------------|---|--------------------------------|---|
| | | | Depth to Groundwater (feet) | Elevation of Groundwater (feet NGVD) | Depth to Groundwater (feet) | Elevation of Groundwater (feet NGVD) | Depth to Groundwater (feet) | Elevation of Groundwater (feet NGVD) | Depth to Groundwater (feet) | Elevation of Groundwater (feet NGVD) | Depth to Groundwater (feet) | Elevation of Groundwater (feet NGVD) |
| MW-1 | unknown | 25.90 | 9.69 | 16.21 | 9.53 | 16.37 | 10.9 | 15 | 11.39 | 14.51 | NM | NM |
| MW-2 | unknown | 25.38 | 8.99 | 16.39 | 10.36 | 15.02 | Dry | Dry | Dry | Dry | NM | NM |
| MW-3 | unknown | 25.31 | 8.88 | 16.43 | 9.32 | 15.99 | 11.86 | 13.45 | 12.71 | 12.6 | NM | NM |
| MW-101 | 9 - 19 | 26.75 | NM | NM | 10.56 | 16.19 | 11.53 | 15.22 | 12.1 | 14.65 | 12.33 | 14.42 |
| MW-102 | 6 - 16 | 18.89 | NM | NM | 6.62 | 12.27 | 6.86 | 12.03 | 7.44 | 11.45 | 7.93 | 10.96 |
| MW-103 | 6 - 16 | 19.47 | NM | NM | 9.50 | 9.97 | 10.37 | 9.1 | 10.74 | 8.73 | 11.15 | 8.32 |
| MW-104 | 5 - 15 | 17.67 | NM | NM | NM | NM | 7.93 | 9.74 | 8.89 | 8.78 | 9.06 | 8.61 |
| MW-105 | 19 - 29 | 38.84 | NM | NM | 19.49 | 19.35 | 20.21 | 18.63 | 20.7 | 18.14 | 21.18 | 17.66 |
| GEO-1 | 5 - 20 | 25.88 | 9.76 | 16.12 | 9.90 | 15.98 | 10.92 | 14.96 | 11.36 | 14.52 | NM | NM |
| GEO-2 | 5 - 20 | 26.54 | 10.43 | 16.11 | NM | NM | 11.38 | 15.16 | 11.91 | 14.63 | NM | NM |
| GEO-3 | 5 - 20 | 25.64 | NM | NM | 9.59 | 16.05 | 9.87 | 15.77 | 10.67 | 14.97 | 11.67 | 13.97 |
| GEO-4 | 4 - 19 | 21.69 | NM | NM | 7.79 | 13.9 | 9.85 | 11.84 | 10.78 | 10.91 | 11.25 | 10.44 |
| GEO-5 | 5 - 20 | 20.14 | NM | NM | 6.78 | 13.36 | 9.08 | 11.06 | 9.96 | 10.18 | 10.29 | 9.85 |
| GEO-6 | 5 - 20 | 17.62 | NM | NM | 5.66 | 11.96 | 7.39 | 10.23 | 8.23 | 9.39 | 8.43 | 9.19 |
| SH-1 | 9 - 14 | 29.55 | 10.15 | 19.4 | 11.40 | 18.15 | Dry | Dry | Dry | Dry | NM | NM |
| SH-2 | 7 - 14 | 29.64 | 5.71 | 23.93 | 7.86 | 21.78 | 12.07 | 17.57 | 12.22 | 17.42 | NM | NM |
| SH-3 | 8 - 13 | 29.66 | 7.54 | 22.12 | 8.56 | 21.1 | 12.73 | 16.93 | 12.96 | 16.7 | NM | NM |
| SH-4 | 11 - 16 | 29.63 | 13.53 | 16.1 | 13.48 | 16.15 | 14.48 | 15.15 | 15.02 | 14.61 | NM | NM |
| SH-5 | 8 - 13 | 29.63 | Dry | Dry | NM | NM | 12.99 | 16.64 | 13.03 | 16.6 | NM | NM |
| SH-MW1 | 10 - 30 | 24.02 | 6.72 | 17.3 | NM | NM | 11.44 | 12.58 | 12.18 | 11.84 | NM | NM |
| SH-MW2 | 10 - 25 | 24.27 | 9.33 | 14.94 | NM | NM | 12.05 | 12.22 | 12.69 | 11.58 | NM | NM |
| SH-MW3 | 10 - 24 | 22.31 | 7.80 | 14.51 | NM | NM | 10.26 | 12.05 | 11.03 | 11.28 | NM | NM |

General Notes:

1. bgs = below ground surface.
2. NGVD = National Geodetic Vertical Datum of 1929.
3. The top of the PVC riser was used as the measuring point for depth to groundwater.

Table 2
Summary of Monitoring Wells and Groundwater Elevations
50 Tufts Street
Somerville, MA

| Location Name | Well Screen Interval (feet bgs) | Elevation of Top of PVC (feet NGVD) | 8/1/06 | | 8/3/06 | | 8/16/06 | | 9/29/06 | | 10/4/06 | |
|---------------|---------------------------------|-------------------------------------|-----------------------------|--------------------------------------|-----------------------------|--------------------------------------|-----------------------------|--------------------------------------|-----------------------------|--------------------------------------|-----------------------------|--------------------------------------|
| | | | Depth to Groundwater (feet) | Elevation of Groundwater (feet NGVD) | Depth to Groundwater (feet) | Elevation of Groundwater (feet NGVD) | Depth to Groundwater (feet) | Elevation of Groundwater (feet NGVD) | Depth to Groundwater (feet) | Elevation of Groundwater (feet NGVD) | Depth to Groundwater (feet) | Elevation of Groundwater (feet NGVD) |
| MW-1 | unknown | 25.90 | NM | NM | NM | NM | 11.9 | 14.00 | NM | NM | 11.88 | 14.02 |
| MW-2 | unknown | 25.38 | NM | NM | NM | NM | Dry | NM | NM | NM | Destroyed | NM |
| MW-3 | unknown | 25.31 | NM | NM | NM | NM | 13.73 | 11.58 | NM | NM | 13.75 | 11.56 |
| MW-101 | 9 - 19 | 26.75 | 12.51 | 14.24 | 13.47 | 13.28 | 12.78 | 13.97 | 12.85 | 13.90 | 12.76 | 13.99 |
| MW-102 | 6 - 16 | 18.89 | 8.16 | 10.73 | 9.11 | 9.78 | 8.51 | 10.38 | 8.68 | 10.21 | 8.52 | 10.37 |
| MW-103 | 6 - 16 | 19.47 | 11.31 | 8.16 | 12.24 | 7.23 | 11.72 | 7.75 | 11.98 | 7.49 | 11.92 | 7.55 |
| MW-104 | 5 - 15 | 17.67 | 9.39 | 8.28 | 10.29 | 7.38 | 9.87 | 7.80 | 9.95 | 7.72 | 9.92 | 7.75 |
| MW-105 | 19 - 29 | 38.84 | 21.43 | 17.41 | 22.41 | 16.43 | 21.91 | 16.93 | 22.27 | 16.57 | 22.18 | 16.66 |
| GEO-1 | 5 - 20 | 25.88 | NM | NM | NM | NM | 11.82 | 14.06 | NM | NM | 11.85 | 14.03 |
| GEO-2 | 5 - 20 | 26.54 | NM | NM | NM | NM | 12.51 | 14.03 | NM | NM | 12.51 | 14.03 |
| GEO-3 | 5 - 20 | 25.64 | 11.85 | 13.79 | 12.84 | 12.8 | 12.25 | 13.39 | 12.37 | 13.27 | 12.35 | 13.29 |
| GEO-4 | 4 - 19 | 21.69 | 11.45 | 10.24 | 12.43 | 9.26 | 11.9 | 9.79 | 12.09 | 9.60 | 12.04 | 9.65 |
| GEO-5 | 5 - 20 | 20.14 | 10.56 | 9.58 | 11.51 | 8.63 | 10.99 | 9.15 | 11.21 | 8.93 | 11.15 | 8.99 |
| GEO-6 | 5 - 20 | 17.62 | 8.73 | 8.89 | 9.64 | 7.98 | 9.25 | 8.37 | 9.41 | 8.21 | 9.26 | 8.36 |
| SH-1 | 9 - 14 | 29.55 | NM | NM | NM | NM | Dry | NM | NM | NM | Dry | NM |
| SH-2 | 7 - 14 | 29.64 | NM | NM | NM | NM | 11.98 | 17.66 | NM | NM | 12 | 17.64 |
| SH-3 | 8 - 13 | 29.66 | NM | NM | NM | NM | Dry | NM | NM | NM | Dry | NM |
| SH-4 | 11 - 16 | 29.63 | NM | NM | NM | NM | 15.09 | 14.54 | NM | NM | 15.1 | 14.53 |
| SH-5 | 8 - 13 | 29.63 | NM | NM | NM | NM | Dry | NM | NM | NM | Dry | NM |
| SH-MW1 | 10 - 30 | 24.02 | NM | NM | NM | NM | 13.09 | 10.93 | NM | NM | 13.17 | 10.85 |
| SH-MW2 | 10 - 25 | 24.27 | NM | NM | NM | NM | 13.38 | 10.89 | NM | NM | 13.41 | 10.86 |
| SH-MW3 | 10 - 24 | 22.31 | NM | NM | NM | NM | 13 | 9.31 | NM | NM | 12.04 | 10.27 |

General Notes:

1. bgs = below ground surface.
2. NGVD = National Geodetic Vertical Datum of 1929.
3. The top of the PVC riser was used as the measuring point for depth to groundwater.

Table 3
Chemical Testing Results - Indoor Air Samples
 50 Tufts Street
 Somerville, MA

| Analyte | Method | Sample Location: | | 9 Tufts St., basement | | | | 9 Tufts St., 1st floor | | 9 Tufts St., 1st floor, left apartment | | 9 Tufts St., 1st floor, right apartment | | | | | | | |
|---|--------|--|--|-------------------------------|--|----------------------------------|--|----------------------------------|--|--|--|---|--|----------------------------------|--|-------------------|--|----------|--|
| | | Sample Name: | | IA-6 | | 045160-9Tufts-BR | | 045160-9Tufts-BR | | IA-5 | | 045160-9Tufts-1L | | 045160-9Tufts-1R | | | | | |
| | | Sample Date: Collected By: | | 2/23/05 Shaw Environmental | | 3/23/06 GEI Consultants, Inc. | | 7/24/06 GEI Consultants, Inc. | | 2/23/05 Shaw Environmental | | 3/23/06 GEI Consultants, Inc. | | 3/23/06 GEI Consultants, Inc. | | | | | |
| | | Units: | | ug/m ³ | | ppbV | | ug/m ³ | | ppbV | | ug/m ³ | | ppbV | | ug/m ³ | | ppbV | |
| | | DEP Background Concentrations in Indoor Air | | ug/m ³ | | ppbV | | ug/m ³ | | ppbV | | ug/m ³ | | ppbV | | ug/m ³ | | ppbV | |
| Volatile Organic Compounds (VOCs) Carbon tetrachloride Chloroform Chloromethane 1,2-Dichloroethane Methylene chloride Tetrachloroethylene (PCE) 1,1,1-Trichloroethane Trichloroethylene (TCE) | TO-15 | 1 | | < 1.3 | | < 0.20 | | < 1.3 | | < 0.20 | | < 1.3 | | < 0.20 | | < 1.3 | | < 0.20 | |
| | | 3 | | 0.54 J | | 0.11 J | | 1.3 | | 0.26 | | 1.2 | | 0.78 J | | < 0.98 | | < 0.20 | |
| | | NS | | 0.91 | | 0.44 | | 1.1 L | | 0.53 L | | 1.0 | | 1.4 L | | 0.69 L | | 0.69 L | |
| | | NS | | < 0.81 | | < 0.20 | | < 0.81 | | < 0.20 | | < 0.81 | | < 0.20 | | < 0.81 | | < 0.20 | |
| | | 10 | | 0.56 J | | 0.16 J | | < 1.9 M | | < 0.55 M | | 11 | | < 1.8 M | | < 0.52 M | | < 0.36 M | |
| | | 11 | | 1.3 J | | 0.19 J | | 2.4 | | 0.35 | | 1.8 | | < 1.4 | | 0.27 | | 0.14 J | |
| | | 30 | | < 1.1 | | < 0.20 | | < 1.1 | | < 0.20 | | < 1.1 | | < 1.1 | | < 0.20 | | < 0.20 | |
| | | 5 | | < 1.1 | | < 0.20 | | < 1.1 | | < 0.20 | | < 1.1 | | < 1.1 | | < 0.20 | | < 0.20 | |

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the laboratory data sheets.
2. ug/m³ = micrograms per cubic meter.
3. ppbV = parts per billion by volume.
4. DEP Background Concentrations obtained from MADEP BWSC NERO Memorandum "Latest Revision of the Indoor Air Contaminants Comparison Table," dated August 2002.
5. NS = No DEP Background Concentration has been established for this compound.
6. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
7. Results in bold exceed the DEP Background Concentration in Indoor Air.
8. NT = Not tested.

Qualifying Notes:

- J The reported result is below the laboratory reporting limit and is estimated.
- L The reported result is estimated because the calculated relative percent difference (RPD) between a sample and the matrix duplicate was above the quality control limit specified in the Quality Assurance Project Plan (QAPP).
- M The reporting limit is elevated due to a detection of the analyte in a method blank sample, trip blank sample, or both.

Table 3
Chemical Testing Results - Indoor Air Samples
50 Tufts Street
Somerville, MA

| Sample Location: | | | 11 Tufts St., 1st floor | | | | 17 Tufts St., basement | | | | | | |
|-----------------------------------|--------|--|----------------------------|---------------------------------------|--------|---|---------------------------|--|----------|--|--------|---|--------|
| Analyte | Method | DEP Background Concentrations in Indoor Air | | IA-1 2/23/05 Shaw Environmental | | 045160-11/13Tufts-1 3/24/06 GEI Consultants, Inc. | | IA-11 3/24/05 Shaw Environmental | | 045160-17Tufts-B 3/24/06 GEI Consultants, Inc. | | 045160-17Tufts-C (duplicate) 3/24/06 GEI Consultants, Inc. | |
| | | Units: | | | | | | | | | | | |
| | | ug/m ³ | ppbV | ug/m ³ | ppbV | ug/m ³ | ppbV | ug/m ³ | ppbV | ug/m ³ | ppbV | ug/m ³ | ppbV |
| Volatile Organic Compounds (VOCs) | TO-15 | 1 | 0.16 | < 1.3 | < 0.20 | < 1.3 | < 0.20 | 0.69 J | 0.11 J | < 1.3 | < 0.20 | < 1.3 | < 0.20 |
| | | 3 | 0.6 | 2.8 | 0.57 | < 0.98 | < 0.20 | 1.5 | 0.30 | 1.1 | 0.23 | < 0.98 | < 0.20 |
| | | NS | NS | 0.99 | 0.48 | 1.4 L | 0.7 L | 2.7 | 1.3 | 0.97 | 0.47 | 1.2 L | 0.58 L |
| | | NS | NS | < 0.81 | < 0.20 | < 0.81 | < 0.20 | 0.85 | 0.21 | < 0.81 | < 0.20 | < 0.81 | < 0.20 |
| | | 10 | 2.83 | 0.80 | 0.23 | < 1.2 M | < 0.34 M | < 2.7 M | < 0.77 M | 1.5 | 0.43 | 59.1 L | 17 L |
| | | 11 | 1.6 | 1.0 J | 0.15 J | < 1.4 | < 0.20 | 1.8 | 0.27 | 8.8 | 1.3 | 1.3 J | 0.19 J |
| | | 30 | 5.41 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | 0.71 J | 0.13 J | < 1.1 | < 0.20 | < 1.1 | < 0.20 |
| | | 5 | 0.92 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | 0.91 J | 0.17 J | < 1.1 | < 0.20 |

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the laboratory data sheets.
2. $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.
3. ppbV = parts per billion by volume.
4. DEP Background Concentrations obtained from MADEP BWSC NERO Memorandum "Latest Revision of the Indoor Air Contaminants Comparison Table" dated August 2002.
5. NS = No DEP Background Concentration has been established for this compound.
6. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
7. Results in bold exceed the DEP Background Concentration in Indoor Air.
8. NT = Not tested.

Qualifying Notes:

- J** The reported result is below the laboratory reporting limit and is estimated.
- L** The reported result is estimated because the calculated relative percent difference (RPD) between a sample and the matrix duplicate was above the quality control limit specified in the Quality Assurance Project Plan (QAPP).
- M** The reporting limit is elevated due to a detection of the analyte in a method blank sample, trip blank sample, or both.

Table 3
Chemical Testing Results - Indoor Air Samples
 50 Tufts Street
 Somerville, MA

| Sample Location: | | | | 17 Tufts St., 1st floor | | | | 19 Tufts St., basement | | | | | | | | | | | | | | | |
|-----------------------------------|--------|--|------|----------------------------|--------|--------------|--------------------|-------------------------------|-----------------------|-------------------|--------|------------------|--------------------|-------------------|---------|------------------|-----------------------|---------------------------------|---------|------------------|-----------------------|---------------------------------|------|
| Analyte | Method | DEP Background Concentrations in Indoor Air | | Units: | | Sample Name: | | Sample Date: Collected By: | | IA-12 | | 045160-17Tufts-1 | | IA-13 | | 045160-19Tufts-B | | 045160-19Tufts-C (duplicate) | | 045160-19Tufts-B | | 045160-19Tufts-C (duplicate) | |
| | | ug/m ³ | ppbV | ug/m ³ | ppbV | 3/24/05 | Shaw Environmental | 3/24/05 | GEI Consultants, Inc. | ug/m ³ | ppbV | 3/24/05 | Shaw Environmental | ug/m ³ | ppbV | 3/23/06 | GEI Consultants, Inc. | ug/m ³ | ppbV | 6/29/06 | GEI Consultants, Inc. | ug/m ³ | ppbV |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Volatile Organic Compounds (VOCs) | | TO-15 | 1 | 0.16 | < 1.3 | < 0.20 | < 1.3 | < 0.20 | < 0.98 | < 0.20 | < 0.98 | < 0.20 | < 1.3 | < 0.20 | < 0.98 | < 0.20 | < 1.3 | < 0.20 | < 0.98 | < 0.20 | < 1.3 | < 0.20 | |
| Carbon tetrachloride | | 3 | 0.6 | 1.9 | 0.39 | 0.39 | 0.8 L | 0.8 L | 1.7 L | 0.8 L | 0.85 | 0.41 | 0.85 | 0.88 L | 1.8 L | 0.85 L | 3.1 | 1.5 | 0.83 J | 0.17 J | 0.88 J | 0.18 J | |
| Chloroform | | NS | NS | 1.1 | 0.52 | 0.52 | < 0.20 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.41 | < 0.20 | |
| Chloromethane | | NS | NS | < 0.81 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | |
| 1,2-Dichloroethane | | 10 | 2.83 | 1.0 | 0.3 | 0.3 | < 4.2 M | < 1.2 M | < 4.2 M | < 1.2 M | 0.35 J | 0.1 J | 0.35 J | < 3.2 M | < 4.2 M | < 1.2 M | < 14 M | < 4 M | < 1.2 M | < 4 M | < 13 M | < 3.6 M | |
| Methylene chloride | | 11 | 1.6 | 4.7 | 0.69 | 0.69 | 2.9 | 0.43 | 2.9 | 0.43 | 3.2 | 0.47 | 3.2 | 7.5 | 6.6 | 0.98 | 4.1 | 0.60 | 0.98 | 3.8 | 0.56 | | |
| Tetrachloroethylene (PCE) | | 30 | 5.41 | < 1.1 | < 0.20 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 0.20 | < 1.1 | < 0.20 | | |
| 1,1,1-Trichloroethane | | 5 | 0.92 | < 1.1 | < 0.20 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | 2.1 | 0.39 | < 0.20 | 1.6 | 0.30 | | |
| Trichloroethylene (TCE) | | | | | | | | | | | | | | | | | | | | | | | |

Table 3
Chemical Testing Results - Indoor Air Samples
50 Tufts Street
Somerville, MA

| Sample Location: | | | 19 Tufts St., 1st floor | | | | 23 Tufts St., basement | | | | | | |
|-----------------------------------|--------|---|----------------------------|--------------------|------------------|-----------------------|---------------------------|-----------------------|------------------|-----------------------|---------|--------|--------|
| Analyte | Method | DEP Background Concentrations in Indoor Air | | Sample Name: | | Sample Date: | | Sample Date: | | Sample Date: | | | |
| | | ug/m ³ | ppbV | 3/24/05 | | 3/23/06 | | 6/29/06 | | 8/3/06 | | | |
| | | | | Shaw Environmental | | GEI Consultants, Inc. | | GEI Consultants, Inc. | | GEI Consultants, Inc. | | | |
| | | | | ug/m ³ | ppbV | ug/m ³ | ppbV | ug/m ³ | ppbV | ug/m ³ | ppbV | | |
| | | | | IA-14 | 045160-19Tufts-1 | 045160-19Tufts-1 | IA-8 | 045160-23Tufts-B | 045160-23Tufts-B | 045160-23Tufts-B | | | |
| Volatile Organic Compounds (VOCs) | TO-15 | 1 | 0.16 | < 1.3 | < 0.20 | 0.69 J | 0.11 J | < 1.3 | < 0.20 | < 1.3 | < 0.20 | 0.69 J | 0.11 J |
| | | 3 | 0.6 | 0.78 J | 0.16 J | 5.4 | 1.1 | 0.88 J | 0.18 J | 3.7 | 0.76 | NT | NT |
| | | NS | NS | 1.1 | 0.52 | 2.3 | 1.1 | 1.1 | 0.54 | 1.9 | 0.91 | NT | NT |
| | | NS | NS | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 |
| | | 10 | 2.83 | 0.34 J | 0.099 J | < 14 M | < 4.1 M | 0.49 J | 0.14 J | < 2.4 M | < 0.7 M | NT | NT |
| | | 11 | 1.6 | 0.95 J | 0.14 J | 2.4 | 0.35 | 2.3 | 0.34 | 2.8 | 0.42 | 10 | 1.5 |
| | | 30 | 5.41 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | 1.5 | 0.28 | 0.60 J | 0.11 J |
| | | 5 | 0.92 | < 1.1 | < 0.20 | 1.7 | 0.31 | < 1.1 | < 0.20 | 1.0 J | 0.19 J | < 1.1 | < 0.20 |

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the laboratory data sheets.
2. $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.
3. ppbV = parts per billion by volume.
4. DEP Background Concentrations obtained from MADEP BWSC NERO Memorandum "Latest Revision of the Indoor Air Contaminants Comparison Table," dated August 2002.
5. NS = No DEP Background Concentration has been established for this compound.
6. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
7. Results in bold exceed the DEP Background Concentration in Indoor Air.
8. NT = Not tested.

Qualifying Notes:

- J** The reported result is below the laboratory reporting limit and is estimated.
- L** The reported result is estimated because the calculated relative percent difference (RPD) between a sample and the matrix duplicate was above the quality control limit specified in the Quality Assurance Project Plan (QAPP).
- M** The reporting limit is elevated due to a detection of the analyte in a method blank sample, trip blank sample, or both.

Table 3
Chemical Testing Results - Indoor Air Samples
 50 Tufts Street
 Somerville, MA

| Sample Location: | | | 23 Tufts St., 1st floor | | | | | | 25 Tufts St., basement | | | |
|----------------------------------|--------|--|-------------------------------|--------|----------------------------------|--------|----------------------------------|--------|---------------------------------|--------|-------------------------------|----------|
| | | | IA-7 | | 045160-23Tufts-1 | | 045160-23Tufts-1 | | 045160-23Tufts-1 | | IA-4 | |
| | | | 2/23/05 Shaw Environmental | | 3/24/06 GEI Consultants, Inc. | | 6/28/06 GEI Consultants, Inc. | | 8/3/06 GEI Consultants, Inc. | | 2/23/05 Shaw Environmental | |
| Analyte | Method | DEP Background Concentrations in Indoor Air | ug/m ³ | | ppbV | | ug/m ³ | | ppbV | | ug/m ³ | |
| | | | ppbV | | ug/m ³ | | ppbV | | ug/m ³ | | ppbV | |
| Volatle Organic Compounds (VOCs) | TO-15 | | | | | | | | | | | |
| Carbon tetrachloride | | 1 | < 1.3 | < 0.20 | 0.94 J | 0.15 J | 0.69 J | 0.11 J | < 1.3 | < 0.20 | < 1.3 | < 0.20 |
| Chloroform | | 3 | 0.63 J | 0.13 J | 13 | 2.7 | NT | NT | < 0.98 | < 0.20 | < 0.98 | < 0.20 |
| Chloromethane | | NS | 0.97 | 0.47 | 1.6 | 0.78 | NT | NT | 0.74 | 0.36 | 1.1 L | 0.52 L |
| 1,2-Dichloroethane | | NS | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 |
| Methylene chloride | | 10 | 0.52 J | 0.15 J | 396 L | 114 L | NT | NT | 0.49 J | 0.14 J | < 1.6 M | < 0.47 M |
| Tetrachloroethylene (PCE) | | 11 | 1.6 | 0.23 | 94.9 | 14.0 | 9.5 | 1.4 | 1.6 | 0.23 | 3.2 | 0.47 |
| 1,1,1-Trichloroethane | | 30 | < 1.1 | < 0.20 | 1.0 J | 0.19 J | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 |
| Trichloroethylene (TCE) | | 5 | < 1.1 | < 0.20 | 0.64 J | 0.12 J | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 |

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the laboratory data sheets.
2. ug/m³ = micrograms per cubic meter.
3. ppbV = parts per billion by volume.
4. DEP Background Concentrations obtained from MADEP BWSC NERO Memorandum "Latest Revision of the Indoor Air Contaminants Comparison Table," dated August 2002.
5. NS = No DEP Background Concentration has been established for this compound.
6. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
7. Results in bold exceed the DEP Background Concentration in Indoor Air.
8. NT = Not tested.

Qualifying Notes:

- J The reported result is below the laboratory reporting limit and is estimated.
- L The reported result is estimated because the calculated relative percent difference (RPD) between a sample and the matrix duplicate was above the quality control limit specified in the Quality Assurance Project Plan (QAPP).
- M The reporting limit is elevated due to a detection of the analyte in a method blank sample, trip blank sample, or both.

Table 3
Chemical Testing Results - Indoor Air Samples
 50 Tufts Street
 Somerville, MA

| Sample Location: | | | 25 Tufts St., 1st floor | | | | 27 Tufts St., basement | | | | | | | | | | |
|-----------------------------------|--------|--|----------------------------|--------|--------|-------------------|---------------------------|------------------|--------|-------------------|---------|------------------|---------|-------------------|--------|------|--|
| Analyte | Method | DEP Background Concentrations in Indoor Air | | IA-3 | | 045160-25Tufts-1 | | 045160-25Tufts-1 | | IA-10 | | 045160-27Tufts-B | | 045160-27Tufts-B | | | |
| | | ug/m ³ | | ppbV | | ug/m ³ | | ppbV | | ug/m ³ | | ppbV | | ug/m ³ | | ppbV | |
| | | Units: | | | | | | | | | | | | | | | |
| | | Sample Name: | | | | | | | | | | | | | | | |
| | | Sample Date: Collected By: | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| Volatile Organic Compounds (VOCs) | | TO-15 | | | | | | | | | | | | | | | |
| Carbon tetrachloride | | 1 | 0.16 | < 1.3 | < 0.20 | < 1.3 | < 0.20 | < 1.3 | < 0.20 | < 1.3 | < 0.20 | 0.69 J | 0.11 J | < 1.3 | < 0.20 | | |
| Chloroform | | 3 | 0.6 | 2.0 | 0.4 | < 0.98 | < 0.20 | NT | NT | < 0.98 | < 0.20 | < 0.98 | < 0.20 | NT | NT | | |
| Chloromethane | | NS | NS | 0.95 | 0.46 | 1.1 L | 0.54 L | NT | NT | 2.9 L | 1.4 L | 1.3 | 0.65 | NT | NT | | |
| 1,2-Dichloroethane | | NS | NS | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | | |
| Methylene chloride | | 10 | 2.83 | 0.35 J | 0.1 J | < 1.9 M | < 0.54 M | NT | NT | < 4.2 M | < 1.2 M | < 2.1 M | < 0.6 M | NT | NT | | |
| Tetrachloroethylene (PCE) | | 11 | 1.6 | < 1.4 | < 0.20 | 1.7 | 0.25 | 2 | 0.29 | < 1.4 | < 0.20 | 117 | 17.3 | 1.6 | 0.23 | | |
| 1,1,1-Trichloroethane | | 30 | 5.41 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | 1.0 J | 0.19 J | < 1.1 | < 0.20 | | |
| Trichloroethylene (TCE) | | 5 | 0.92 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | | |

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the laboratory data sheets.
2. ug/m³ = micrograms per cubic meter.
3. ppbV = parts per billion by volume.
4. DEP Background Concentrations obtained from MADEP BWSC NERO Memorandum "Latest Revision of the Indoor Air Contaminants Comparison Table," dated August 2002.
5. NS = No DEP Background Concentration has been established for this compound.
6. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
7. Results in bold exceed the DEP Background Concentration in Indoor Air.
8. NT = Not tested.

Qualifying Notes:

- J The reported result is below the laboratory reporting limit and is estimated.
- L The reported result is estimated because the calculated relative percent difference (RPD) between a sample and the matrix duplicate was above the quality control limit specified in the Quality Assurance Project Plan (QAPP).
- M The reporting limit is elevated due to a detection of the analyte in a method blank sample, trip blank sample, or both.

Table 3

Chemical Testing Results - Indoor Air Samples

50 Tufts Street
Somerville, MA

| Sample Location: | | | 27 Tufts St., 1st floor | | | | | | | | | | |
|-----------------------------------|--------|------------------------------|-------------------------------|-------------------|----------------------------------|-------------------|----------------------------------|-------------------|---------------------------------|-------------------|--------|--------|--|
| Sample Name: | | | IA-9 | | 045160-27Tufts-1 | | 045160-27Tufts-1 | | 045160-27Tufts-1 | | | | |
| Sample Date: Collected By: | | | 2/23/05 Shaw Environmental | | 3/23/06 GEI Consultants, Inc. | | 6/28/06 GEI Consultants, Inc. | | 8/3/06 GEI Consultants, Inc. | | | | |
| Analyte | Method | Units: | | DEP Background | | ug/m ³ | | ppbV | | ug/m ³ | | ppbV | |
| | | Concentrations in Indoor Air | | | | | | | | | | | |
| | | ug/m ³ | ppbV | ug/m ³ | ppbV | ug/m ³ | ppbV | ug/m ³ | ppbV | ug/m ³ | ppbV | | |
| Volatile Organic Compounds (VOCs) | | | | | | | | | | | | | |
| Carbon tetrachloride | TO-15 | 1 | 0.16 | < 1.3 | < 0.20 | < 1.3 | < 0.20 | < 1.3 | < 0.20 | < 1.3 | < 0.20 | < 0.2 | |
| Chloroform | | 3 | 0.6 | < 0.98 | < 0.20 | < 0.98 | < 0.20 | < 0.98 | < 0.20 | < 0.98 | < 0.20 | NT | |
| Chloromethane | | NS | NS | 1.2 | 0.59 | 110 L | 53.5 L | 1.6 | 0.79 | NT | NT | NT | |
| 1,2-Dichloroethane | | NS | NS | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.81 | < 0.20 | < 0.20 | |
| Methylene chloride | | 10 | 2.83 | 0.52 J | 0.15 J | < 2.0 M | < 0.59 M | < 2.2 M | < 0.63 M | NT | NT | NT | |
| Tetrachloroethylene (PCE) | | 11 | 1.6 | < 1.4 | < 0.20 | < 1.4 | < 0.20 | < 3.8 | 0.56 | 0.81 J | 0.12 J | < 0.20 | |
| 1,1,1-Trichloroethane | | 30 | 5.41 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 1.1 | < 1.1 | < 1.1 | < 0.20 | |
| Trichloroethylene (TCE) | | 5 | 0.92 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | | |

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the laboratory data sheets.
2. $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.
3. ppbV = parts per billion by volume.
4. DEP Background Concentrations obtained from MADEP BWSC NERO Memorandum "Latest Revision of the Indoor Air Contaminants Comparison Table," dated August 2002.
5. NS = No DEP Background Concentration has been established for this compound.
6. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
7. Results in bold exceed the DEP Background Concentration in Indoor Air.
8. NT = Not tested.

Qualifying Notes:

- J** The reported result is below the laboratory reporting limit and is estimated.
- L** The reported result is estimated because the calculated relative percent difference (RPD) between a sample and the matrix duplicate was above the quality control limit specified in the Quality Assurance Project Plan (QAPP).
- M** The reporting limit is elevated due to a detection of the analyte in a method blank sample, trip blank sample, or both.

Table 4

PCE in Air in Micrograms per Cubic Meter ($\mu\text{g}/\text{m}^3$)
50 Tufts Street
Somerville, MA

| Address/Location | Basement | | | | | 1st Floor | | | | | Outdoors | |
|--|-----------|-------------|-----------|--------|--------|-----------|----------------|--------|-----------|--------|---------------|-------------|
| | Feb-05 | Mar-06 | Jun-06 | Jul-06 | Aug-06 | Feb-05 | Mar-06 | Jun-06 | Jul-06 | Aug-06 | Mar-06 | Jun-06 |
| 9 Tufts Street | 1.3 J | 2.4 | NS | 3.1 | NS | 1.8 | < 1.4 / 0.95 J | NS | 1.2 J / 2 | NS | NS | NS |
| 11/13 Tufts Street | 1.8 / 1.9 | < 1.4 | 2.4 | NS | NS | 1.0 J | < 1.4 | 1.8 | NS | NS | NS | NS |
| 17 Tufts Street | 8.8 | 1.3 J / 1.4 | NS | NS | NS | 4.7 | 2.9 | NS | NS | NS | < 1.4 / < 1.4 | 1.2 J / 2.4 |
| 19 Tufts Street | 3.2 | 7.5 / 6.6 | 4.1 / 3.8 | NS | NS | 0.95 J | 1.2 J | 2.4 | NS | NS | NS | NS |
| 23 Tufts Street | 2.3 | 2.8 | 125 | NS | 10 | 1.6 | < 1.4 | 94.9 | NS | 9.5 | NS | NS |
| 25 Tufts Street | 1.6 | 3.2 | NS | NS | 3.9 | < 1.4 | 1.7 | NS | NS | 2 | NS | NS |
| 27 Tufts Street | < 1.4 | < 1.4 | 117 | NS | 1.6 | < 1.4 | < 1.4 | 3.8 | NS | 0.81 J | NS | NS |
| Northeast Corner of 50 Tufts Street Property | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | < 1.4 / < 1.4 | 8.1 / 5.4 |

General Notes:

1. NS = Not sampled.
2. Where two results in a single month are shown for a residence, the results include a duplicate sample.
3. Where two results in a single month are shown for an outdoor sample, the results represent two different outdoor sample locations.
4. NA = Not applicable.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 5

Chemical Testing Results - Outdoor Air Samples
 50 Tufts Street
 Somerville, MA

| Sample Location: Sample Name: Sample Date: Collected By: | | Outdoor, northeast corner of property | | | | | | | |
|---|--------|---------------------------------------|----------|------------------------------|----------|------------------------------|----------|---------|---------|
| | | 045160-Tufts-O-1A 3/23/06 | | 045160-Tufts-O-1B 3/24/06 | | 045160-Tufts-O-1B 6/28/06 | | | |
| | | GEI Consultants, Inc. | | GEI Consultants, Inc. | | GEI Consultants, Inc. | | | |
| | | ug/m ³ | ppbV | ug/m ³ | ppbV | ug/m ³ | ppbV | | |
| Analyte | Method | Units: | | | | | | | |
| Volatile Organic Compounds (VOCs) Carbon Tetrachloride Chloromethane Methylene chloride Tetrachloroethylene (PCE) 1,1,1-Trichloroethane Trichloroethylene (TCE) | TO-15 | < 1.3 | < 0.20 | < 1.3 | < 0.20 | 0.69 J | 0.11 J | 0.11 J | |
| | | 1.1 L | 0.53 L | 1.1 L | 0.55 L | 1.4 | 0.70 | 1.4 | 0.66 |
| | | < 1.2 M | < 0.35 M | < 0.97 M | < 0.28 M | < 3.0 M | < 0.86 M | < 5.6 M | < 1.6 M |
| | | < 1.4 | < 0.20 | < 1.4 | < 0.20 | 8.1 | 1.2 | 5.4 | 0.80 |
| | | < 1.1 | < 0.20 | < 1.1 | < 0.20 | 0.65 J | 0.12 J | 1.1 | 0.21 |
| | | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 | 0.91 J | 0.17 J |

Table 5

Chemical Testing Results - Outdoor Air Samples
50 Tufts Street
Somerville, MA

| Sample Location: | | Outdoor, in tree in front of 17 Tufts St. | | | | | |
|-----------------------------------|--------|---|----------|---|----------|---|---------|
| Sample Name: | | 045160-Tufts-O-2A 3/23/06 GEI Consultants, Inc. | | 045160-Tufts-O-2B 3/24/06 GEI Consultants, Inc. | | 045160-Tufts-O-1A 6/28/06 GEI Consultants, Inc. | |
| Sample Date: | | | | | | | |
| Collected By: | | | | | | | |
| Units: | | | | | | | |
| Analyte | Method | ug/m ³ | ppbV | ug/m ³ | ppbV | ug/m ³ | ppbV |
| Volatile Organic Compounds (VOCs) | TO-15 | | | | | | |
| Carbon Tetrachloride | | < 1.3 | < 0.81 | < 1.3 | < 0.20 | < 1.3 | < 0.20 |
| Chloromethane | | 1.3 L | 0.62 L | 1.3 L | 0.61 L | 1.8 | 0.89 |
| Methylene chloride | | < 1.9 M | < 0.56 M | < 0.83 M | < 0.24 M | < 5.9 M | < 1.7 M |
| Tetrachloroethylene (PCE) | | < 1.4 | < 0.20 | < 1.4 | < 0.20 | 2.4 | 0.36 |
| 1,1,1-Trichloroethane | | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 |
| Trichloroethylene (TCE) | | < 1.1 | < 0.20 | < 1.1 | < 0.20 | < 1.1 | < 0.20 |

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the laboratory data sheets.
2. ug/m³ = micrograms per cubic meter.
3. ppbV = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.

Qualifying Notes:

- J The reported result is below the laboratory reporting limit and is estimated.
- L The reported result is estimated because the calculated relative percent difference (RPD) between a sample and the matrix duplicate was above the quality control limit specified in the Quality Assurance Project Plan (QAPP).
- M The reporting limit is elevated due to a detection of the analyte in a method blank sample, trip blank sample, or both.

Table 6
Chemical Testing Results - Soil Samples
50 Tufts Street
Somerville, MA

| Location Name: Sample Depth (ft bgs): Sample Name: Sample Date: Collected By: Geologic Unit: | | | | GEO-1 | | GEO-4 | SH-MW1 | SH-MW2 | SH-MW3 | SH-1 | SH-2 | SH-3 | SH-4 | SH-5 | SH-B1 | MW101 | | | |
|---|--------|-------|---------------------------|-----------------|-----------------|-----------------|-------------------|-------------------|-------------------|----------|----------|-------------------|----------|-------------------|----------|---------------------|-----------|-----------|-----------|
| | | | | 0-2 | 6-8 | 11-13 | 10-12 | 15-17 | 15-17 | 12-14 | 4-5 | 3-4 | 8-12 | 4-8 | 8-12 | 2-3 | 13.5-15.5 | 15.5-17.5 | 17.5-19.5 |
| | | | | GEO-1 | GEO-1 | GEO-4 | SH MW1 S3 | SH MW2 S4 | SH MW3 S4 | SH1 S4 | SH2 S2A | SH3 S1D | SH4 S3 | SH5 S2 | SHB1 S3 | MW101 S1 | MW101 S4 | MW101 S5 | MW101 S6 |
| | | | | 8/12/04 | 8/12/04 | 8/13/04 | 7/3/02 | 7/3/02 | 7/3/02 | 6/21/02 | 6/21/02 | 6/21/02 | 6/21/02 | 6/21/02 | 6/21/02 | 4/27/06 | 5/1/06 | 5/1/06 | 5/1/06 |
| | | | | Geolnsight Sand | Geolnsight Sand | Geolnsight Sand | SHA Silt and Clay | SHA Silt and Clay | SHA Clay and Silt | SHA Sand | SHA Sand | SHA Sand and Silt | SHA Sand | SHA Sand and Silt | SHA Sand | GEI Sand and Gravel | GEI Sand | GEI Sand | GEI Sand |
| Analyte | Method | Units | Method 1 Standard S1/GW-2 | | | | | | | | | | | | | | | | |
| Volatile Organic Compounds (VOCs) | 8260B | mg/kg | | | | | | | | | | | | | | | | | |
| Butanone, 2- (MEK) | | | 50 | < 0.673 | < 0.950 | < 0.556 | < 0.0074 | < 1 | < 0.0088 | < 5.5 | < 7.7 | < 6.4 | <0.540 | < 6.6 | 1.1 | < 0.33 | < 0.25 | < 0.26 | < 0.23 |
| Dichloroethane, 1,1- | | | 5 | < 0.067 | < 0.095 | < 0.056 | <0.001 | < 0.160 | < 0.0013 | <0.820 | < 1.20 | < 0.960 | < 0.08 | < 0.990 | < 0.100 | < 0.13 | < 0.1 | < 0.1 | < 0.093 |
| Dichloroethene, cis-1,2- | | | 0.4 | < 0.067 | < 0.095 | < 0.056 | < 0.00074 | < 0.100 | < 0.00088 | < 0.550 | < 0.770 | < 0.640 | < 0.054 | < 0.660 | < 0.071 | < 0.13 | < 0.1 | < 0.1 | < 0.093 |
| Ethylbenzene | | | 500 | < 0.067 | < 0.095 | < 0.056 | < 0.00074 | < 0.100 | < 0.00088 | < 0.550 | < 0.770 | < 0.640 | < 0.054 | < 0.660 | < 0.071 | < 0.13 | < 0.1 | < 0.1 | < 0.093 |
| 4-Methyl - 2 - pentanone (MIBK) | | | 50 | <0.673 | < .950 | < .556 | < 0.00074 | < 0.100 | < 0.0088 | < 5.5 | < 7.70 | < 6.40 | < 0.540 | < 6.6 | 0.86 | < 0.33 | < 0.25 | < 0.26 | < 0.23 |
| Tetrachloroethylene (PCE) | | | 10 | 2.45 | 8.07 | 0.111 | 0.01 | 23 | 0.16 | 1500 | 1800 | 140 | 4.8 | 61 | 7.8 | 0.989 | 0.0649 J | 0.054 J | 0.0699 J |
| Toluene | | | 300 | < 0.0673 | < 0.095 | < 0.0556 | 0.0037 | < 0.160 | < 0.0013 | < 0.82 | < 1.2 | < 0.96 | < 0.08 | < 0.990 | < 0.1 | < 0.33 | < 0.25 | < 0.26 | < 0.23 |
| Trichloroethane, 1,1,1- | | | 500 | 0.145 | 1.33 | 0.0795 | < 0.00074 | 0.24 | 0.0091 | < 0.55 | < 0.770 | < 0.640 | 0.37 | < 0.660 | 2.7 | 0.0767 J | < 0.1 | < 0.1 | < 0.093 |
| Trichloroethylene (TCE) | | | 2 | 0.164 | 1.12 | < 0.0556 | < 0.00074 | 0.32 | 0.0062 | < 0.55 | 2.0 | < 0.640 | 1.4 | < 0.660 | 4.4 | 0.358 | < 0.1 | < 0.1 | < 0.093 |
| Xylene, m,p- | | | NS | < 135 | < .190 | < .111 | < 0.00074 | < 0.100 | < 0.00088 | < 0.550 | < 0.770 | < 0.640 | < 0.054 | < 0.660 | < 0.071 | < 0.13 | < 0.1 | < 0.1 | < 0.093 |
| Xylene, o- | | | NS | < 67.3 | < .095 | <0.556 | < 0.00074 | < 0.100 | < 0.00088 | < 0.550 | < 0.770 | < 0.640 | < 0.054 | < 0.660 | < 0.071 | < 0.13 | < 0.1 | < 0.1 | < 0.093 |
| Total Xylenes | | | 300 | < 135 | < .190 | <0.111 | < 0.00074 | < 0.100 | < 0.00088 | < 0.550 | < 0.770 | < 0.640 | < 0.054 | < 0.660 | < 0.071 | < 0.13 | < 0.1 | < 0.1 | < 0.093 |
| Total VOCs | | | NS | 2.76 | 10.5 | 0.191 | 0.0137 | 23.6 | 0.175 | 1500 | 1800 | 140 | 6.57 | 61 | 16.9 | 1.42 | 0.0649 J | 0.054 J | 0.0699 J |
| Volatile Petroleum Hydrocarbons (VPH) | MAVPH | mg/kg | | NT | NT | NT | NT | NT | NT | | | | | NT | | NT | NT | NT | NT |
| C5-C8 Aliphatics | | | 100 | | | | | | | 300 | 833 | 43 | <1.75 | | 2.95 | | | | |
| C9-C12 Aliphatics | | | 1000 | | | | | | | <25.9 | <29.9 | <26.8 | <1.75 | | <2.15 | | | | |
| C9-C10 Aromatics | | | 100 | | | | | | | <25.9 | <29.9 | <26.8 | <1.75 | | <2.15 | | | | |
| Extractable Petroleum Hydrocarbons (EPH) | MAEPH | mg/kg | | NT | NT | NT | NT | NT | NT | | | | | | | NT | NT | NT | NT |
| C9-C18 Aliphatics | | | 1000 | | | | | | | <10.9 | <68.2 | <11.2 | <10.6 | <12.8 | <11.1 | | | | |
| C19-C36 Aliphatics | | | 3000 | | | | | | | <10.9 | 144 | <11.2 | <10.6 | <12.8 | <11.1 | | | | |
| C11-C22 Aromatics | | | 800 | | | | | | | <10.9 | 916 | 86.4 | <10.6 | 41.0 | <11.1 | | | | |

- General Notes:**
- Generally, only analytes detected in at least one sample are reported here. For a complete list of analytes see the laboratory data sheets.
 - "<" = The analyte was not detected at a concentration above the specified limit.
 - MCP = 310 CMR 40.0000 Massachusetts Contingency Plan with revisions effective April 3, 2006.
 - Method 1 Standards (e.g., S1/GW2) are cited from the MCP.
 - ft bgs = feet below ground surface.
 - mg/kg = milligrams per kilogram.
 - NS = No MCP standard has been established for this analyte.
 - SHA = Sanborn Head & Associates.
 - Results in bold exceed the applicable Method 1 S1/GW2 Standard.
 - ND = The analyte was not detected above the laboratory reporting limit. See the laboratory data sheets for the laboratory reporting limit.
 - NT = Not tested

Qualifying Note:
J The reported result is below the laboratory reporting limit and is estimated.

Table 6
Chemical Testing Results - Soil Samples
50 Tufts Street
Somerville, MA

| Location Name: Sample Depth (ft bgs): Sample Name: Sample Date: Collected By: Geologic Unit: | | | | MW102 | | MW103 | | | MW104 | | | MW105 | |
|---|--------|-------|---------------------------------|-----------------|-----------------|-----------------|------------|----------|------------|------------|-------------|-----------------|----------|
| | | | | 2-3 | 12.5-14.6 | 2-3 | 6-8 | 14-16 | 0-5 | 5-10 | 10-15 | 2-3 | 23-25 |
| | | | | MW102 S1 | MW102 S5 | MW103 S1 | MW103 S2 | MW103 S6 | MW104 S1 | MW104 S2 | MW104 S3C | MW105 S1 | MW105 S9 |
| | | | | 4/27/06 | 5/1/06 | 4/27/06 | 5/1/06 | 5/1/06 | 5/17/06 | 5/17/06 | 5/17/06 | 4/28/06 | 5/2/06 |
| | | | | GEI | GEI | GEI | GEI | GEI | GEI | GEI | GEI | GEI | GEI |
| | | | | Sand and Gravel | Sand and Gravel | Sand and Gravel | Sandy Silt | Sand | Silty Sand | Sandy Silt | Silty Sand | Sand and Gravel | Sand |
| Analyte | Method | Units | Method 1 Standard S1/GW-2 | | | | | | | | | | |
| Volatile Organic Compounds (VOCs) | 8260B | mg/kg | | | | | | | | | | | |
| Butanone, 2- (MEK) | | | 50 | < 0.29 | < 0.21 | < 0.3 | < 0.23 | < 0.21 | < 0.32 | < 0.23 | < 0.26 | < 0.38 | < 0.21 |
| Dichloroethane, 1,1- | | | 5 | < 0.12 | < 0.083 | < 0.12 | < 0.091 | < 0.082 | < 0.13 | < 0.092 | 1.39 | < 0.15 | < 0.083 |
| Dichloroethene, cis-1,2- | | | 0.4 | < 0.12 | < 0.083 | < 0.12 | < 0.091 | < 0.082 | < 0.13 | < 0.092 | 1.44 | < 0.15 | < 0.083 |
| Ethylbenzene | | | 500 | < 0.12 | < 0.083 | < 0.12 | < 0.091 | < 0.082 | 0.0416 J | < 0.092 | < 0.1 | < 0.15 | < 0.083 |
| 4-Methyl - 2 - pentanone (MIBK) | | | 50 | < 0.29 | < 0.21 | < 0.3 | < 0.23 | < 0.21 | < 0.32 | < 0.23 | < 0.26 | < 0.38 | < 0.21 |
| Tetrachloroethylene (PCE) | | | 10 | < 0.12 | 0.164 | < 0.12 | < 0.091 | 0.722 | 0.949 | 4.25 | 0.564 | < 0.15 | < 0.083 |
| Toluene | | | 300 | < 0.29 | < 0.21 | < 0.3 | < 0.23 | < 0.21 | 0.0757 J | 0.0216 J | < 0.26 | < 0.38 | < 0.21 |
| Trichloroethane, 1,1,1- | | | 500 | < 0.12 | < 0.083 | < 0.12 | < 0.091 | < 0.082 | < 0.13 | < 0.092 | 0.781 | < 0.15 | < 0.083 |
| Trichloroethylene (TCE) | | | 2 | < 0.12 | < 0.083 | < 0.12 | < 0.091 | < 0.082 | < 0.13 | 0.093 | 0.593 | < 0.15 | < 0.083 |
| Xylene, m,p- | | | NS | < 0.12 | < 0.083 | < 0.12 | < 0.091 | < 0.082 | 0.125 J | < 0.092 | < 0.1 | < 0.15 | < 0.083 |
| Xylene, o- | | | NS | < 0.12 | < 0.083 | < 0.12 | < 0.091 | < 0.082 | 0.0571 J | < 0.092 | < 0.1 | < 0.15 | < 0.083 |
| Total Xylenes | | | 300 | < 0.12 | < 0.083 | < 0.12 | < 0.091 | < 0.082 | 0.182 | < 0.092 | < 0.1 | < 0.15 | < 0.083 |
| Total VOCs | | | NS | ND | 0.16 | ND | ND | 0.72 | 1.43 | 4.37 | 4.77 | ND | ND |
| Volatile Petroleum Hydrocarbons (VPH) | MAVPH | mg/kg | | NT | NT | NT | NT | NT | NT | NT | NT | NT | NT |
| C5-C8 Aliphatics | | | 100 | | | | | | | | | | |
| C9-C12 Aliphatics | | | 1000 | | | | | | | | | | |
| C9-C10 Aromatics | | | 100 | | | | | | | | | | |
| Extractable Petroleum Hydrocarbons (EPH) | MAEPH | mg/kg | | NT | NT | NT | NT | NT | NT | NT | NT | NT | NT |
| C9-C18 Aliphatics | | | 1000 | | | | | | | | | | |
| C19-C36 Aliphatics | | | 3000 | | | | | | | | | | |
| C11-C22 Aromatics | | | 800 | | | | | | | | | | |

- General Notes:**
- Generally, only analytes detected in at least one sample are reported here. For a complete list of analytes see the laboratory data sheets.
 - "<" = The analyte was not detected at a concentration above the specified limit.
 - MCP = 310 CMR 40.0000 Massachusetts Contingency Plan with revisions effective April 3, 2006.
 - Method 1 Standards (e.g., S1/GW2) are cited from the MCP.
 - ft bgs = feet below ground surface.
 - mg/kg = milligrams per kilogram.
 - NS = No MCP standard has been established for this analyte.
 - SHA = Sanborn Head & Associates.
 - Results in bold exceed the applicable Method 1 S1/GW2 Standard.
 - ND = The analyte was not detected above the laboratory reporting limit.
See the laboratory data sheets for the laboratory reporting limit.
 - NT = Not tested

Qualifying Note:
J The reported result is below the laboratory reporting limit and is estimated.

Table 7
Chemical Testing Results - Groundwater Samples
50 Tufts Street
Somerville, MA

| Sample Location: Sample Name: Well Screen Interval (feet bgs): Sample Date: Collected by: | | | | SH-1 | SH-3 | SH-4 | SH-MW1 | | SH-MW2 | | | SH-MW3 | | MW-1 | | | MW-3 | | | GEO-1 | | |
|---|--------|-------|----------------------|------------|------------|---------|--------|---------|--------|------------|---------|--------|------------|---------|---------|------------|---------|---------|------------|---------|------------|-----|
| | | | | SH-1 | SH-3 | SH-4 | SH-MW1 | SH-MW1 | SH-MW2 | SH-MW2 | SH-MW2 | SH-MW3 | SH-MW-3 | MW-1 | MW-1 | MW-1 | MW-3 | MW-3 | MW-3 | GEO-1 | GEO-1 | |
| | | | | 9-14 | 8-13 | 11-16 | 10-30 | 10-30 | 10-25 | 10-25 | 10-25 | 10-24 | 10-24 | unknown | unknown | unknown | unknown | unknown | unknown | 5-20 | 5-20 | |
| | | | | 8/9/04 | 8/9/04 | 5/25/06 | 7/8/02 | 5/23/06 | 7/8/02 | 8/16/04 | 5/23/06 | 7/8/02 | 5/23/06 | 7/1/02 | 8/9/04 | 5/23/06 | 7/1/02 | 8/9/04 | 5/23/06 | 8/16/04 | 5/23/06 | |
| Analyte | Method | Units | Method 1 Standard | Geolnsight | Geolnsight | GEI | SHA | GEI | SHA | Geolnsight | GEI | SHA | Geolnsight | GEI | SHA | Geolnsight | GEI | SHA | Geolnsight | GEI | Geolnsight | GEI |
| | | | GW-2 | | | | | | | | | | | | | | | | | | | |
| Volatile Organic Compounds (VOCs) | | | | 8260B | ug/L | | | | | | | | | | | | | | | | | |
| Acetone | | | 50000 | <4000 | <2000 | 30 | <2500 | < 5 | <250 | <2000 | < 5 | <2500 | < 5 | <50000 | <40000 | 40 | <2500 | <2000 | < 5 | <400 | < 5 | |
| Benzene | | | 2000 | <200 | <100 | < 0.5 | <250 | < 0.5 | <25 | <100 | < 0.5 | <250 | < 0.5 | <5000 | <2000 | 2 | <250 | <100 | 0.37 J | <20 | < 0.5 | |
| Carbon tetrachloride | | | 2 | <200 | <100 | < 1 | <250 | < 1 | <25 | <100 | < 1 | <250 | < 1 | <5000 | <2000 | 19 | <250 | <100 | < 1 | <20 | 3.6 | |
| Chlorobenzene | | | 200 | <200 | <100 | < 1 | <250 | < 1 | <25 | <100 | < 1 | <250 | < 1 | <5000 | <2000 | 1.1 | <250 | <100 | < 1 | <20 | 0.76 J | |
| Chloroethane | | | NS | <400 | <200 | < 2 | <500 | < 2 | <50 | <200 | < 2 | <500 | < 2 | <10000 | <4000 | < 2 | <500 | <200 | < 2 | <40 | < 2 | |
| Chloroform | | | 400 | <200 | <100 | 13.3 | <380 | 2.1 | <38 | <100 | < 1 | <380 | 0.88 J | <7500 | <2000 | 3.7 | <380 | <100 | 2.1 | <20 | < 1 | |
| Dichloroethane, 1,1- | | | 1000 | <200 | <100 | 15.9 | <380 | 11.4 | <38 | <100 | 1 | <380 | 21.6 | <7500 | <2000 | 59.8 | <380 | <100 | <1 | <20 | 4.3 | |
| Dichloroethane, 1,2- | | | 5 | <200 | <100 | 103 | <250 | < 1 | <25 | <100 | < 1 | <250 | <1 | <5000 | <2000 | 4 | <250 | <100 | < 1 | <20 | <1 | |
| Dichloroethene, 1,1- | | | 80 | <200 | <100 | 556 | <250 | 11.7 | <25 | <100 | 10.1 | <250 | 91 | <5000 | <2000 | 11500 | <250 | <100 | 6.9 | 39.8 | 989 | |
| Dichloroethene, cis-1,2- | | | 100 | <200 | <100 | 16.6 | <250 | 2.1 | <25 | <100 | 3.9 | <250 | 37.2 | <5000 | <2000 | 24.3 | <250 | <100 | < 1 | <20 | 4.3 | |
| Dichloroethene, trans-1,2- | | | 90 | <200 | <100 | < 1 | <380 | < 1 | <38 | <100 | < 1 | <380 | < 1 | <7500 | <2000 | < 1 | <380 | <100 | < 1 | <20 | < 1 | |
| Dichloropropane, 1,2- | | | 3 | <200 | <100 | < 2 | <880 | < 2 | <88 | <100 | < 2 | <880 | < 2 | <18000 | <2000 | 4.5 | <880 | <100 | < 2 | <20 | < 2 | |
| Dioxane, 1,4- | | | NS | NT | NT | 57700 | NT | < 25 | NT | NT | < 25 | NT | < 25 | NT | NT | < 25 | NT | NT | < 25 | NT | < 25 | |
| Ethylbenzene | | | 30000 | <200 | <100 | < 1 | <250 | < 1 | <25 | <100 | < 1 | <250 | < 1 | <5000 | <2000 | 2.8 | <250 | <100 | < 1 | <20 | < 1 | |
| Hexanone, 2- | | | NS | <2000 | <1000 | 5.3 | <2500 | < 5 | <250 | <1000 | < 5 | <2500 | < 5 | <50000 | <20000 | < 5 | <2500 | <1000 | < 5 | <200 | < 5 | |
| Methyl tert-butyl ether | | | 50000 | <200 | <100 | < 1 | <500 | < 1 | <50 | <100 | < 1 | <500 | 5.1 | <10000 | <2000 | < 1 | <500 | <100 | < 1 | <20 | 64.2 | |
| Methylene chloride | | | 10000 | <2000 | <1000 | 12.2 | <2500 | < 2 | <250 | <1000 | < 2 | <2500 | < 2 | <50000 | <20000 | < 2 | <2500 | <1000 | < 2 | <200 | < 2 | |
| Propylbenzene, n- | | | NS | <200 | <100 | < 5 | <250 | < 5 | <25 | <100 | < 5 | <250 | < 5 | <5000 | <2000 | 0.42 J | <250 | <100 | < 5 | <20 | < 5 | |
| Tetrachloroethane, 1,1,1,2- | | | 10 | <200 | <100 | 40.4 | <250 | < 5 | <25 | <100 | < 5 | <250 | < 5 | <5000 | <2000 | 38.1 | <250 | <100 | 1.9 J | <20 | 5.7 | |
| Tetrachloroethene | | | 50 | 49700 | 19500 | 7240 | 21000 | 16200 | 2000 | 7170 | 1730 | 26000 | 16900 | 52000 | 24200 | 34400 | 16000 | 16200 | 22100 | 1880 | 18600 | |
| Tert-Amyl-Methyl-Ether | | | NS | NT | NT | 1.9 J | NT | NT | NT | NT | <2 | NT | < 2 | NT | NT | < 2 | NT | NT | < 2 | NT | < 2 | |
| Toluene | | | 8000 | <200 | <100 | 1.8 | <380 | 0.61 J | <38 | <100 | < 1 | <380 | < 1 | <7500 | <2000 | 19.6 | <380 | <100 | 0.62 J | <20 | 1.2 | |
| Trichloroethane, 1,1,1- | | | 4000 | 1150 | 2070 | 7610 | <250 | 34.5 | 660 | 1550 | 158 | 1200 | 989 | 290000 | 112000 | 255000 | <250 | <100 | 39.1 | 1720 | 19100 | |
| Trichloroethane, 1,1,2- | | | 900 | <200 | <100 | 172 | <380 | < 1 | <38 | <100 | < 1 | <380 | < 1 | <7500 | <2000 | 85.8 | <380 | <100 | < 1 | <20 | < 1 | |
| Trichloroethene | | | 30 | 906 | 1440 | 7580 | <500 | 141 | 190 | 572 | 92.8 | 870 | 482 | 220000 | 128000 | 175000 | <250 | <100 | 86.6 | 898 | 10000 | |
| Trimethylbenzene, 1,2,4- | | | NS | <200 | <100 | < 5 | <1200 | < 5 | <120 | <100 | < 5 | <1200 | < 5 | <25000 | <2000 | 1.3 J | <1200 | <100 | < 5 | <20 | < 5 | |
| Trimethylbenzene, 1,3,5- | | | NS | <200 | <100 | < 5 | <1200 | < 5 | <120 | <100 | < 5 | <1200 | < 5 | <25000 | <2000 | 1.3 J | <1200 | <100 | < 5 | <20 | < 5 | |
| Vinyl chloride | | | 2 | <200 | <100 | < 1 | <500 | < 1 | <50 | <100 | < 1 | <500 | < 1 | <10000 | <2000 | < 1 | <500 | <100 | < 1 | <20 | < 1 | |
| Xylene, m,p- | | | NS | <400 | <200 | < 1 | <250 | < 1 | <25 | <200 | < 1 | <250 | < 1 | <5000 | <4000 | 4.8 | <250 | <200 | < 1 | <40 | < 1 | |
| Xylene, o- | | | NS | <200 | <100 | < 1 | <250 | < 1 | <25 | <100 | < 1 | <250 | < 1 | <5000 | <2000 | 9.2 | <250 | <100 | < 1 | <20 | < 1 | |
| Xylene, Total | | | 9000 | <400 | <200 | < 1 | <250 | < 1 | <25 | <200 | < 1 | <250 | < 1 | <5000 | <4000 | 14 | <250 | <200 | < 1 | <40 | < 1 | |
| Total VOCs | | | NS | 51800 | 23000 | 81100 | 21000 | 16400 | 2850 | 9290 | 2000 | 28100 | 18500 | 562000 | 264000 | 476000 | 16000 | 16200 | 22200 | 4540 | 48800 | |

- General Notes:**
- Analytes detected in at least one sample are reported here. For a complete list of analytes see the laboratory data sheets.
 - "<" = The analyte was not detected at a concentration above the specified limit.
 - MCP = 310 CMR 40.0000 Massachusetts Contingency Plan with revisions effective April 3, 2006.
 - Method 1 Standards (e.g. GW2) are cited from the MCP.
 - NS = No standard for this analyte.
 - ft bgs = feet below ground surface.
 - ug/L = micrograms per liter.
 - SHA = Sanborn Head & Associates.
 - Results in bold exceed the current applicable Method 1 GW2 standard.
 - NT = Not tested.

Qualifying Note:
J The reported result is below the laboratory reporting limit and is estimated.

Table 7
Chemical Testing Results - Groundwater Samples
50 Tufts Street
Somerville, MA

| Sample Location: Sample Name: Well Screen Interval (feet bgs): Sample Date: Collected by: | | | | GEO-2 | | GEO-3 | | | GEO-4 | | GEO-5 | | GEO-6 | | MW101 | MW102 | MW103 | | MW104 | MW105 |
|---|--------|-------|----------------------|------------|---------|------------|---------|---------|------------|---------|------------|---------|------------|---------|---------|---------|---------|--------|---------|---------|
| | | | | GEO-2 | GEO-2 | GEO-3 | GEO-3 | MW-900 | GEO-4 | GEO-4 | GEO-5 | GEO-5 | GEO-6 | GEO-6 | MW101 | MW102 | MW103 | MW103 | MW104 | MW105 |
| | | | | 5-20 | 5-20 | 5-20 | 5-20 | 5-20 | 4-19 | 4-19 | 5-20 | 5-20 | 5-20 | 5-20 | 9-19 | 6-16 | 6-16 | 6-16 | 5-15 | 19-29 |
| | | | | 8/16/04 | 5/23/06 | 8/16/04 | 5/24/06 | 5/24/06 | 8/16/04 | 5/24/06 | 8/16/04 | 5/24/06 | 8/16/04 | 5/24/06 | 5/24/06 | 5/24/06 | 5/24/06 | 8/7/06 | 5/23/06 | 5/24/06 |
| Analyte | Method | Units | Method 1 Standard | Geolnsight | GEI | Geolnsight | GEI | GEI | Geolnsight | GEI | Geolnsight | GEI | Geolnsight | GEI | GEI | GEI | GEI | GEI | GEI | GEI |
| | | | GW-2 | | | | | | | | | | | | | | | | | |
| Volatile Organic Compounds (VOCs) | | | | 8260B | ug/L | | | | | | | | | | | | | | | |
| Acetone | | | 50000 | 487 | < 5 | <1000 | < 5 | < 5 | <2000 | < 5 | <2000 | < 5 | <200 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| Benzene | | | 2000 | <5 | < 0.5 | <50 | < 0.5 | < 0.5 | <100 | < 0.5 | <100 | < 0.5 | <10 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.50 | < 0.5 | < 0.5 |
| Carbon tetrachloride | | | 2 | <5 | < 1 | <50 | < 1 | < 1 | <100 | < 1 | <100 | < 1 | <10 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 |
| Chlorobenzene | | | 200 | <5 | < 1 | <50 | < 1 | < 1 | <100 | < 1 | <100 | < 1 | <10 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 |
| Chloroethane | | | NS | <10 | < 2 | <100 | < 2 | < 2 | <200 | < 2 | <200 | < 2 | <20 | < 2 | < 2 | < 2 | < 2 | < 2 | 2.7 | < 2 |
| Chloroform | | | 400 | <5 | < 1 | <50 | < 1 | < 1 | <100 | < 1 | <100 | < 1 | <10 | < 1 | 1.8 | < 1 | < 1 | < 1 | < 1 | < 1 |
| Dichloroethane,1,1- | | | 1000 | <5 | 2.2 | <50 | < 1 | < 1 | <100 | 2.7 | <100 | 3 | <10 | 2 | <1 | <1 | 27.2 | 3.7 | 33 | < 1 |
| Dichloroethane,1,2- | | | 5 | <5 | < 1 | <50 | < 1 | < 1 | <100 | < 1 | <100 | < 1 | <10 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 |
| Dichloroethene,1,1- | | | 80 | 23.2 | 14.2 | 108 | < 1 | < 1 | <100 | 6.1 | <100 | 8.9 | <10 | 4.6 | 8.7 | 6.3 | 13.4 | 2 | 3.3 | < 1 |
| Dichloroethene, cis-1,2- | | | 100 | <5 | < 1 | <50 | < 1 | < 1 | <100 | 6.3 | <100 | 12.5 | 14.8 | 9.1 | < 1 | < 1 | < 1 | 3 | 198 | < 1 |
| Dichloroethene, trans-1,2- | | | 90 | <5 | < 1 | <50 | < 2 | < 2 | <100 | < 1 | <100 | < 1 | <10 | < 1 | < 1 | < 1 | < 1 | < 1 | 2.2 | < 1 |
| Dichloropropane,1,2- | | | 3 | <5 | < 2 | <50 | < 25 | < 25 | <100 | < 2 | <100 | < 2 | <10 | < 2 | < 2 | < 2 | < 2 | < 2 | < 2 | < 2 |
| Dioxane,1,4- | | | NS | NT | < 25 | NT | < 1 | < 1 | NT | < 25 | NT | < 25 | NT | < 25 | < 25 | < 25 | < 25 | < 25 | < 25 | < 25 |
| Ethylbenzene | | | 30000 | <5 | < 1 | <50 | < 5 | < 5 | <100 | < 1 | <100 | < 1 | <10 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 |
| Hexanone,2- | | | NS | <50 | < 5 | <500 | < 1 | < 1 | <1000 | < 5 | <1000 | < 5 | <100 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| Methyl tert-butyl ether | | | 50000 | 37.6 | 79.9 | <50 | < 2 | < 2 | <100 | < 1 | <100 | 1.3 | <10 | 1.3 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 |
| Methylene chloride | | | 10000 | <50 | < 2 | <500 | < 5 | < 5 | <1000 | < 2 | <1000 | < 2 | <100 | < 2 | < 2 | < 2 | < 2 | < 2 | < 2 | < 2 |
| Propylbenzene, n- | | | NS | <5 | < 5 | <50 | < 2 | < 2 | <100 | < 5 | <100 | < 5 | <10 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| Tetrachloroethane,1,1,1,2- | | | 10 | <5 | < 5 | <50 | < 5 | < 5 | <100 | < 5 | <100 | < 5 | <10 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| Tetrachloroethene | | | 50 | 285 | 131 | 4020 | 162 | 157 | 12900 | 6690 | 14400 | 2440 | 782 | 675 | 163 | 200 | 2600 | 592 | 60.4 | 7.8 |
| Tert-Amyl-Methyl-Ether | | | NS | NT | < 2 | NT | < 1 | < 1 | NT | < 2 | NT | < 2 | NT | < 2 | < 2 | < 2 | < 2 | < 2 | < 2 | < 2 |
| Toluene | | | 8000 | <5 | < 1 | <50 | < 1 | < 1 | <100 | < 1 | <100 | < 1 | <10 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 |
| Trichloroethane,1,1,1- | | | 4000 | 490 | 125 | 204 | 4 | 4.4 | 1170 | 113 | 646 | 246 | 27.8 | 42.5 | 110 | < 1 | 34 | 4.4 | 21 | < 1 |
| Trichloroethane,1,1,2- | | | 900 | <5 | < 1 | <50 | < 1 | < 1 | <100 | < 1 | <100 | < 1 | <10 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 |
| Trichloroethene | | | 30 | 60 | 27.3 | 507 | 14.4 | 14.1 | 720 | 86.8 | 404 | 146 | 122 | 78.8 | 50.5 | 15.6 | 109 | 24 | 63.4 | < 1 |
| Trimethylbenzene, 1,2,4- | | | NS | <5 | < 5 | <50 | < 5 | < 5 | <100 | < 5 | <100 | < 5 | <10 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| Trimethylbenzene, 1,3,5- | | | NS | <5 | < 5 | <50 | < 5 | < 5 | <100 | < 5 | <100 | < 5 | <10 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| Vinyl chloride | | | 2 | <5 | < 1 | <50 | < 1 | < 1 | <100 | < 1 | <100 | < 1 | <10 | < 1 | < 1 | < 1 | < 1 | < 1 | 23.7 | < 1 |
| Xylene, m,p- | | | NS | <10 | < 1 | <100 | < 1 | < 1 | <200 | < 1 | <200 | < 1 | <20 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 |
| Xylene, o- | | | NS | <5 | < 1 | <50 | < 1 | < 1 | <100 | < 1 | <100 | < 1 | <10 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 |
| Xylene, Total | | | 9000 | <10 | < 1 | <100 | < 1 | < 1 | <200 | < 1 | <200 | < 1 | <20 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 |
| Total VOCs | | | NS | 1380 | 380 | 4840 | 180 | 176 | 14800 | 6900 | 15500 | 2860 | 947 | 813 | 334 | 222 | 2780 | 629 | 408 | 7.8 |

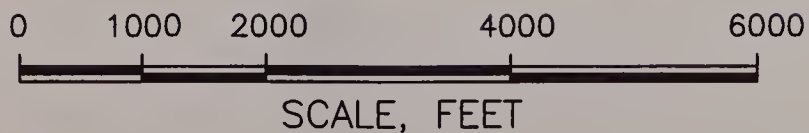
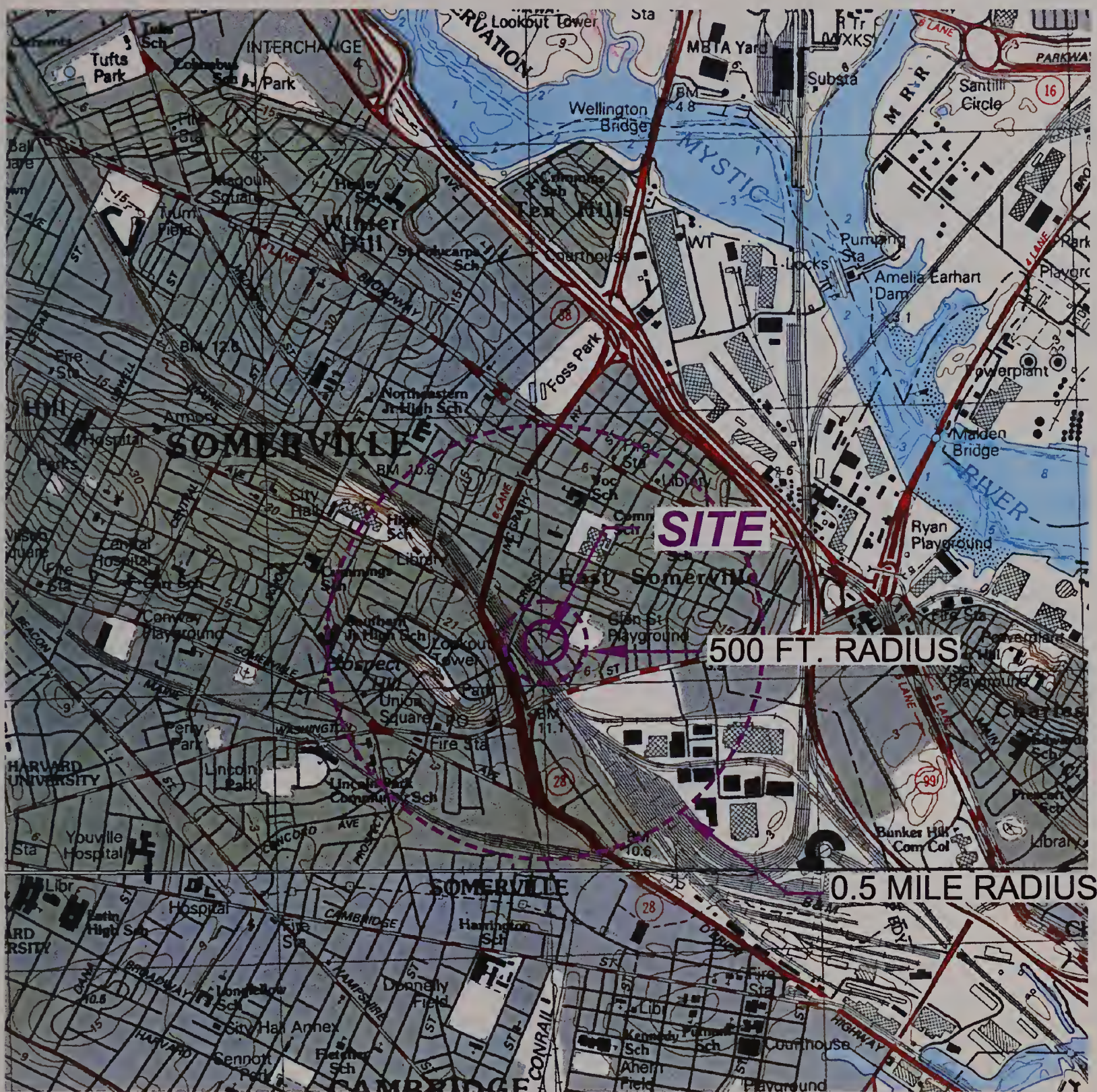
- General Notes:**
- Analytes detected in at least one sample are reported here. For a complete list of analytes see the laboratory data sheets.
 - "<" = The analyte was not detected at a concentration above the specified limit.
 - MCP = 310 CMR 40.0000 Massachusetts Contingency Plan with revisions effective April 3, 2006.
 - Method 1 Standards (e.g. GW2) are cited from the MCP.
 - NS = No standard for this analyte.
 - ft bgs = feet below ground surface.
 - ug/L = micrograms per liter.
 - SHA = Sanborn Head & Associates.
 - Results in bold exceed the current applicable Method 1 GW2 standard.
 - NT = Not tested.

Qualifying Note:
J The reported result is below the laboratory reporting limit and is estimated.



Geotechnical
Environmental and
Water Resources
Engineering





This Image provided by MassGIS is taken from
U.S.G.S. Topographic 7.5 X 15 Minute Series
Boston North, MA Quadrangle, 1985.
Datum is National Geodetic Vertical Datum (NGVD).
Contour Interval is 3 Meters.

IRA Status Report No. 2 and Plan Modification No. 3
50 Tufts Street
Somerville, Massachusetts
UniFirst Corporation
Wilmington, Massachusetts



SITE LOCATION MAP

Project 04516-2

November 2006

Fig. 1



LEGEND:

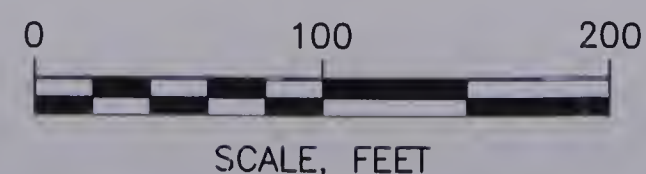
- ▲ 045160-9Tufts-1L APPROXIMATE AIR SAMPLING LOCATION
- ▲ 045160-17Tufts-B PREVIOUS AIR SAMPLING LOCATION
- APPROXIMATE WEATHER STATION LOCATION

APPROXIMATE PREVAILING WIND DIRECTION MEASURED AT THE WEATHER STATION ON 6/28/06 AND 6/29/06



NOTES:

1. THIS PLAN WAS DERIVED FROM CITY OF SOMERVILLE ASSESSORS MAP NO. 93 AND 104, DATED JANUARY 3, 2001.
2. NO ACCESS WAS PROVIDED TO SAMPLE 17 TUFTS STREET DURING THE JUNE-AUGUST 2006 SAMPLING ROUND.



IRA Status Report No. 2 and Plan Modification No. 3
50 Tufts Street
Somerville, Massachusetts
UniFirst Corporation
Wilmington, Massachusetts



AIR SAMPLING LOCATIONS
JUNE/JULY/AUGUST 2006

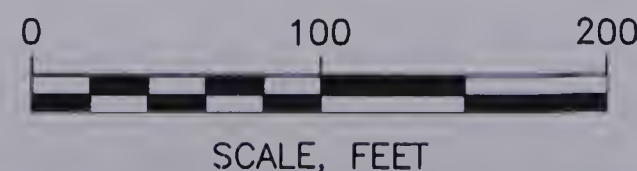
November 2006

Fig. 2




NOTES:

1. THIS PLAN WAS DERIVED FROM CITY OF SOMERVILLE ASSESSORS MAP NO. 93 AND 104, DATED JANUARY 3, 2001.










| |
|---|
| IRA Status Report No. 2 and Plan Modification No. 3 50 Tufts Street Somerville, Massachusetts |
| UniFirst Corporation Wilmington, Massachusetts |

| | |
|---|--|
|  | AIR SAMPLING LOCATIONS SEPTEMBER/OCTOBER 2006 |
| Project 04516-2 | November 2006 <div>Fig. 3</div> |



LEGEND:

-  PROPOSED MONITORING WELL
-  MONITORING WELL INSTALLED BY SANBORN HEAD ASSOCIATES, 2002
-  MONITORING WELL INSTALLED BY GEOINSIGHT, JUNE 2004
-  SOIL BORING ADVANCED BY GEOINSIGHT, AUGUST 2004
-  MONITORING WELL INSTALLED BY GEI, MAY 2006
-  MONITORING WELL INSTALLED PREVIOUSLY, DATE UNKNOWN
-  CHAIN LINK FENCE

GENERAL NOTES:

1. HORIZONTAL CONTROL FOR THIS PLAN WAS ESTABLISHED BY GPS AND IS BASED ON THE NORTH AMERICAN DATUM OF 1983.
2. VERTICAL CONTROL FOR THIS PLAN WAS ESTABLISHED BY GPS AND IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.
3. STREET AND PROPERTY LINES BASED ON SOMERVILLE ASSESSORS MAPS AND ARE BEST FIT RELATIVE TO THE LOCATION OF THE 50 TUFTS ST. BUILDING.
4. EXISTING MONITORING WELL LOCATIONS AND ELEVATIONS WERE ESTABLISHED BY AN ON THE GROUND SURVEY BY BSC GROUP, INC. ON MAY 31, 2006. PVC AND GROUND ELEVATIONS WERE ESTABLISHED BY TRIGONOMETRIC METHODS USING A TOTAL STATION.

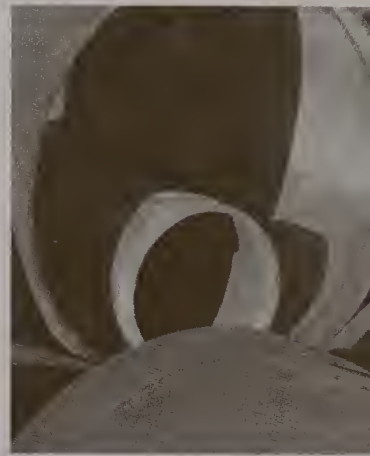
IRA Status Report No. 2 and Plan Modification No. 3
 50 Tufts Street
 Somerville, Massachusetts
 UniFirst Corporation
 Wilmington, Massachusetts

GEI Consultants
 Project 04516-2

EXISTING AND PROPOSED SAMPLING LOCATIONS
 November 2006 **Fig. 4**



Geotechnical
Environmental and
Water Resources
Engineering



Appendix A

Copy of IRA Status Report Transmittal Form (BWSC105)



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC105

**IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM**

Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

3

-

23246

A. RELEASE OR THREAT OF RELEASE LOCATION:

1. Release Name/Location Aid: **50 TUFTS ST & PROP ACROSS THE ST**
2. Street Address: **50 TUFTS ST**
3. City/Town: **SOMERVILLE** 4. ZIP Code: **02145-4129**
5. UTM Coordinates: a. UTM N: **4694322** b. UTM E: **328049**
- ☒ 6. Check here if a Tier Classification Submittal has been provided to DEP for this disposal site.
☐ a. Tier IA ☐ b. Tier IB ☒ c. Tier IC ☐ d. Tier II
- ☐ 7. Check here if this location is Adequately Regulated, pursuant to 310 CMR 40.0110-0114. Specify Program (check one):
☐ a. CERCLA ☐ b. HSWA Corrective Action ☐ c. Solid Waste Management
☐ d. RCRA State Program (21C Facilities)

B. THIS FORM IS BEING USED TO: (check all that apply)

1. List Submittal Date of Initial IRA Written Plan (if previously submitted): **1/9/2006**
(mm/dd/yyyy)
- ☐ 2. Submit an **Initial IRA Plan**.
- ☒ 3. Submit a **Modified IRA Plan** of a previously submitted written IRA Plan.
- ☐ 4. Submit an **Imminent Hazard Evaluation**. (check one)
☐ a. An Imminent Hazard exists in connection with this Release or Threat of Release.
☐ b. An Imminent Hazard does not exist in connection with this Release or Threat of Release.
☐ c. It is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release, and further assessment activities will be undertaken.
☐ d. It is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release. However, response actions will address those conditions that could pose an Imminent Hazard.
- ☐ 5. Submit a request to **Terminate an Active Remedial System or Response Action(s) Taken to Address an Imminent Hazard**.
- ☒ 6. Submit an **IRA Status Report**.
- ☐ 7. Submit a **Remedial Monitoring Report**. (This report can only be submitted through eDEP.)
a. Type of Report: (check one) ☐ i. Initial Report ☐ ii. Interim Report ☐ iii. Final Report
b. Frequency of Submittal: (check all that apply)
☐ i. A Remedial Monitoring Report(s) submitted monthly to address an Imminent Hazard.
☐ ii. A Remedial Monitoring Report(s) submitted monthly to address a Condition of Substantial Release Migration.
☐ iii. A Remedial Monitoring Report(s) submitted concurrent with a IRA Status Report.
c. Number of Remedial Systems and/or Monitoring Programs: _____

A separate BWSC105A, IRA Remedial Monitoring Report, must be filled out for each Remedial System and/or Monitoring Program addressed by this transmittal form.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC105

**IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM** Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

3

-

23246

B. THIS FORM IS BEING USED TO (cont.): (check all that apply)

☐ 8. Submit an **IRA Completion Statement**.

☐ a. Check here if future response actions addressing this Release or Threat of Release notification condition will be conducted as part of the Response Actions planned or ongoing at a Site that has already been Tier Classified under a different Release Tracking Number (RTN) . When linking RTNs, rescoring via the NRS is required if there is a reasonable likelihood that the addition of the new RTN(s) would change the classification of the site.

b. Provide Release Tracking Number of Tier Classified Site (Primary RTN):

-

These additional response actions must occur according to the deadlines applicable to the Primary RTN. Use the Primary RTN when making all future submittals for the site unless specifically relating to this Immediate Response Action.

☐ 9. Submit a **Revised IRA Completion Statement**.

(All sections of this transmittal form must be filled out unless otherwise noted above)

C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT IRA:

1. Identify Media Impacted and Receptors Affected: (check all that apply)

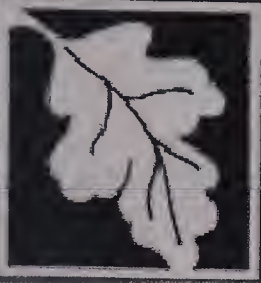
- ☒ a. Air ☒ b. Basement ☒ c. Critical Exposure Pathway ☒ d. Groundwater ☒ e. Residence
☐ f. Paved Surface ☐ g. Private Well ☐ h. Public Water Supply ☐ i. School ☐ j. Sediments
☐ k. Soil ☐ l. Storm Drain ☐ m. Surface Water ☐ n. Unknown ☐ o. Wetland ☐ p. Zone 2
☐ q. Others Specify: _____

2. Identify Oils and Hazardous Materials Released: (check all that apply)

- ☐ a. Oils ☒ b. Chlorinated Solvents ☐ c. Heavy Metals
☐ d. Others Specify: _____

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply, for volumes list cumulative amounts)

- | | |
|--|---|
| <input type="checkbox"/> 1. Assessment and/or Monitoring Only | <input type="checkbox"/> 2. Temporary Covers or Caps |
| <input type="checkbox"/> 3. Deployment of Absorbent or Containment Materials | <input type="checkbox"/> 4. Temporary Water Supplies |
| <input type="checkbox"/> 5. Structure Venting System | <input type="checkbox"/> 6. Temporary Evacuation or Relocation of Residents |
| <input type="checkbox"/> 7. Product or NAPL Recovery | <input type="checkbox"/> 8. Fencing and Sign Posting |
| <input type="checkbox"/> 9. Groundwater Treatment Systems | <input type="checkbox"/> 10. Soil Vapor Extraction |
| <input type="checkbox"/> 11. Bioremediation | <input type="checkbox"/> 12. Air Sparging |



**IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM**

Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

3

-

23246

D. DESCRIPTION OF RESPONSE ACTIONS (cont.): (check all that apply, for volumes list cumulative amounts)

☐ 13. Excavation of Contaminated Soils

☐ a. Re-use, Recycling or Treatment

☐ i. On Site Estimated volume in cubic yards _____

☐ ii. Off Site Estimated volume in cubic yards _____

ii.a. Receiving Facility: _____ Town: _____ State: _____

ii.b. Receiving Facility: _____ Town: _____ State: _____

iii. Describe: _____

☐ b. Store

☐ i. On Site Estimated volume in cubic yards _____

☐ ii. Off Site Estimated volume in cubic yards _____

ii.a. Receiving Facility: _____ Town: _____ State: _____

ii.b. Receiving Facility: _____ Town: _____ State: _____

☐ c. Landfill

☐ i. Cover Estimated volume in cubic yards _____

Receiving Facility: _____ Town: _____ State: _____

☐ ii. Disposal Estimated volume in cubic yards _____

Receiving Facility: _____ Town: _____ State: _____

☐ 14. Removal of Drums, Tanks or Containers:

a. Describe Quantity and Amount: _____

b. Receiving Facility: _____ Town: _____ State: _____

c. Receiving Facility: _____ Town: _____ State: _____

☐ 15. Removal of Other Contaminated Media:

a. Specify Type and Volume: _____

b. Receiving Facility: _____ Town: _____ State: _____

c. Receiving Facility: _____ Town: _____ State: _____

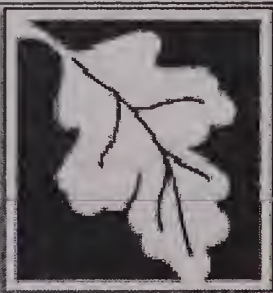
☒ 16. Other Response Actions:

Describe: _____

INSTALLED AIR PURIFIERS IN SIX RESIDENCES ALONG TUFTS STREET.

☐ 17. Use of Innovative Technologies:

Describe: _____



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC105

IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

3 - 23246

E. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> if Section B of this form indicates that an **Immediate Response Action Plan** is being submitted, the response action(s) that is(are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is(are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that an **Imminent Hazard Evaluation** is being submitted, this Imminent Hazard Evaluation was developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and the assessment activity(ies) undertaken to support this Imminent Hazard Evaluation comply(ies) with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000;

> if Section B of this form indicates that an **Immediate Response Action Status Report** and/or a **Remedial Monitoring Report** is(are) being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that an **Immediate Response Action Completion Statement** or a request to **Terminate an Active Remedial System or Response Action(s) Taken to Address an Imminent Hazard** is being submitted, the response action(s) that is(are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is(are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: 9719

2. First Name: ILEEN S

3. Last Name: GLADSTONE

4. Telephone: 7817214012

5. Ext.:

6. FAX:

7. Signature: ILEEN S GLADSTONE

8. Date: 11/10/2006

(mm/dd/yyyy)

9. LSP Stamp:





Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC105

IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

3

-

23246

F. PERSON UNDERTAKING IRA:

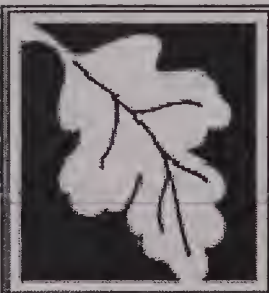
1. Check all that apply: ☐ a. change in contact name ☐ b. change of address ☐ c. change in the person undertaking response actions
2. Name of Organization: **UNIFIRST CORP**
3. Contact First Name: **BRIAN** 4. Last Name: **KEEGAN**
5. Street: **68 JONSPIN RD** 6. Title: **ENV ENG MANAGER**
7. City/Town: **WILMINGTON** 8. State: **MA** 9. ZIP Code: **01887-0000**
10. Telephone: **8003477888** 11. Ext.: 12. FAX:

G. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON UNDERTAKING IRA:

- ☒ 1. RP or PRP ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter
☒ e. Other RP or PRP Specify: **OTHER PRPS**
- ☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)
- ☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))
- ☐ 4. Any Other Person Undertaking IRA Specify Relationship:

H. REQUIRED ATTACHMENT AND SUBMITTALS:

- ☐ 1. Check here if any Remediation Waste, generated as a result of this IRA, will be stored, treated, managed, recycled or reused at the site following submission of the IRA Completion Statement. If this box is checked, you must submit one of the following plans, along with the appropriate transmittal form.
☐ a. A Release Abatement Measure (RAM) Plan (BWSC106) ☐ b. Phase IV Remedy Implementation Plan (BWSC108)
- ☐ 2. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.
- ☐ 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health were notified of the implementation of an Immediate Response Action taken to control, prevent, abate or eliminate an Imminent Hazard.
- ☐ 4. Check here to certify that the Chief Municipal Officer and the Local Board of Health were notified of the submittal of a Completion Statement for an Immediate Response Action taken to control, prevent, abate or eliminate an Imminent Hazard.
- ☐ 5. Check here if any non-updatable information provided on this form is incorrect, e.g. Release Address/Location Aid. Send corrections to the DEP Regional Office.
- ☒ 6. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC105

**IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM** Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

3 - 23246

I. CERTIFICATION OF PERSON UNDERTAKING IRA:

1. I, **BRIAN KEEGAN**, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: **BRIAN KEEGAN** Signature 3. Title: **ENV ENG MANAGER**

4. For: **UNIFIRST CORP** 5. Date: **11/09/2006**
(Name of person or entity recorded in Section F) (mm/dd/yyyy)

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section F.

7. Street: _____

8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____

11. Telephone: _____ 12. Ext.: _____ 13. FAX: _____

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO \$10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

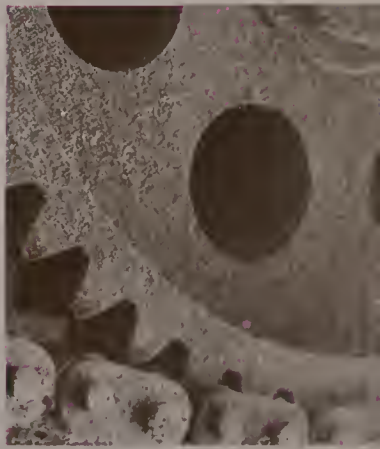
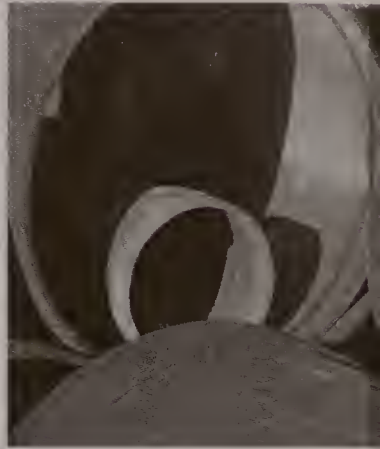
Date Stamp (DEP USE ONLY:)

Received by DEP on

11/10/2006 1:21:42 PM



Geotechnical
Environmental and
Water Resources
Engineering

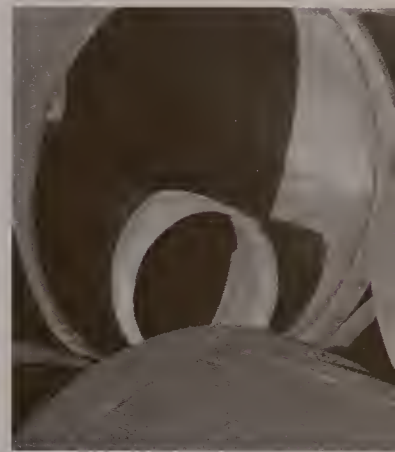


Appendix B

Summa Canister Certifications and Air Sampling Laboratory Data Sheets



Geotechnical
Environmental and
Water Resources
Engineering



Appendix C

Ambient Air Sampling Checklists and Sample Location Photographs



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - 23Tufts - 1

Date: 6/28/06

Sampling personnel: K. Wolfe

Summa Canister ID: M053

Flow Regulator ID: MFC29

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0854

Sampling Finish Time: 1320

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): -30 in-Hg Flow Controller: --- Separate gauge: ---

Pressure gauge reading (After sample collected): -1 in-Hg Flow Controller: --- Separate gauge: ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|-----------------------------|--------|--------|
| Temperature: | 80 °F | 78 °F |
| Barometric Pressure: | 30.25 | 30.18 |
| Prevailing Wind Direction: | NE | NE |
| General Weather Conditions: | Cloudy | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|----------------------|---------|---------|
| Temperature: | 71.2 °F | 70.8 °F |
| Barometric Pressure: | 30.16 | 30.16 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes If Yes, what time: 0854 Taken by: K. Wolfe

Photographs taken after sampling? No If Yes, what time: --- Taken by: ---

Was the building aired out prior to sample collection? No If yes, how long? ---

Windows open? No Ventilation fans? No

Was there significant precipitation within 12 hours of (or during) the sampling event? Drizzle from 1205 - 1300

Were any of the residents home during sampling? Yes If yes, provide detail: The young son was home

Did any of the occupants NOT follow instruction for residents? No If yes, describe below: ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 4.9'

Canister on top of island in kitchen



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - 23Tufts - B

Date: 6/28/06
Sampling personnel: K. Wolfe
Summa Canister ID: M039
Flow Regulator ID: MC066
Sample Type / Analysis Method: TO15/Summa
Sampling Start Time: 0857
Sampling Finish Time: 1322

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No
Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): -28 in-Hg Flow Controller: --- Separate gauge: ---
Pressure gauge reading (After sample collected): -0.5 in-Hg Flow Controller: --- Separate gauge: ---

| Environmental Conditions (Outside): | Before Sampling | After Sampling |
|-------------------------------------|-----------------|----------------|
| Temperature: | 80 °F | 78 °F |
| Barometric Pressure: | 30.25 | 30.18 |
| Prevailing Wind Direction: | NE | NE |
| General Weather Conditions: | Cloudy | Cloudy |

| Environmental Conditions (At Sample Location): | Before Sampling | After Sampling |
|--|-----------------|----------------|
| Temperature: | 71.1 °F | 70.6 °F |
| Barometric Pressure: | 30.16 | 30.16 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? No If Yes, what time: --- Taken by: ---
Photographs taken after sampling? Yes If Yes, what time: 1322 Taken by: K. Wolfe

Was the building aired out prior to sample collection? No If yes, how long? ---
Windows open? No Ventilation fans? No
Was there significant precipitation within 12 hours of (or during) the sampling event? Drizzle from 1205 - 1300
Were any of the residents home during sampling? Yes If yes, provide detail: The young son was home
Did any of the occupants NOT follow instruction for residents? No If yes, describe below: ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 4.1'
Canister on top of stool in basement

23 Tufts Street- First Floor (045160-23Tufts-1)
6/28/06



23 Tufts Street- Basement (045160-23Tufts-B)
6/28/06





AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - 27Tufts - 1

Date: 6/28/06

Sampling personnel: K. Wolfe

Summa Canister ID: M033

Flow Regulator ID: MFC38

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0947

Sampling Finish Time: 1402

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): -30 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): -1 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|-----------------------------|--------|--------|
| Temperature: | 80 °F | 77 °F |
| Barometric Pressure: | 30.25 | 30.17 |
| Prevailing Wind Direction: | NE | NE |
| General Weather Conditions: | Cloudy | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|----------------------|---------|---------|
| Temperature: | 73.4 °F | 73.2 °F |
| Barometric Pressure: | 30.18 | 30.16 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 0947 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? Drizzle from 1205 - 1300

Were any of the residents home during sampling? Yes **If yes, provide detail:** Mr. Papa was home

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 4.4'

Canister on top of work bench in living room



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - 27Tufts - B

Date: 6/28/06

Sampling personnel: K. Wolfe

Summa Canister ID: M135

Flow Regulator ID: MFC26

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0950

Sampling Finish Time: 1404

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): -31 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): -3 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|-----------------------------|--------|--------|
| Temperature: | 80 °F | 77 °F |
| Barometric Pressure: | 30.25 | 30.17 |
| Prevailing Wind Direction: | NE | NE |
| General Weather Conditions: | Cloudy | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|----------------------|---------|---------|
| Temperature: | 72.8 °F | 72.6 °F |
| Barometric Pressure: | 30.16 | 30.16 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 0950 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? Drizzle from 1205 - 1300

Were any of the residents home during sampling? Yes **If yes, provide detail:** Mr. Papa was home

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 4.9'

Canister on top of work bench in basement

27 Tufts Street- First Floor (045160-27Tufts-1)
6/28/06



27 Tufts Street- Basement (045160-27Tufts-B)
6/28/06





AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - Tufts- O - 1A

Date: 6/28/06

Sampling personnel: K. Wolfe

Summa Canister ID: M073

Flow Regulator ID: MC052

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0807

Sampling Finish Time: 1225

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): -31 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): -4 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|-----------------------------|--------|---------|
| Temperature: | 77 °F | 73 °F |
| Barometric Pressure: | 30.27 | 30.20 |
| Prevailing Wind Direction: | NE | NE |
| General Weather Conditions: | Cloudy | Drizzle |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|----------------------|-------|-------|
| Temperature: | 77 °F | 73 °F |
| Barometric Pressure: | 30.27 | 30.20 |

PID readings at sample location (ppm): NM

Photographs taken before sampling? Yes **If Yes, what time:** 0807 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? NA **If yes, how long?** ---

Windows open? NA **Ventilation fans?** NA

Was there significant precipitation within 12 hours of (or during) the sampling event? Drizzle for the last 20 minutes of sampling

Were any of the residents home during sampling? NA **If yes, provide detail:** ---

Did any of the occupants NOT follow instruction for residents? NA **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Outdoor sample

Air intake at 4.8'

Canister attached to tree outside of 17 Tufts Street

Weather station at same location



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - Tufts- O - 1B

Date: 6/28/06

Sampling personnel: K. Wolfe

Summa Canister ID: M151

Flow Regulator ID: MC067

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0820

Sampling Finish Time: 1253

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): -30 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): -4.5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|-----------------------------|--------|---------|
| Temperature: | 77 °F | 73 °F |
| Barometric Pressure: | 30.27 | 30.17 |
| Prevailing Wind Direction: | NE | NE |
| General Weather Conditions: | Cloudy | Drizzle |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|----------------------|-------|-------|
| Temperature: | 77 °F | 73 °F |
| Barometric Pressure: | 30.27 | 30.20 |

PID readings at sample location (ppm): NM

Photographs taken before sampling? Yes **If Yes, what time:** 0820 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? NA **If yes, how long?** ---

Windows open? NA **Ventilation fans?** NA

Was there significant precipitation within 12 hours of (or during) the sampling event? Drizzle for the last 48 minutes of sampling

Were any of the residents home during sampling? NA **If yes, provide detail:** ---

Did any of the occupants NOT follow instruction for residents? NA **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Outdoor sample

Air intake at 4.9'

Canister attached to fence on North side of 50 Tufts Street property



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - Tufts - O - 2A

Date: 6/29/06

Sampling personnel: K. Wolfe

Summa Canister ID: M106

Flow Regulator ID: MC065

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1040

Sampling Finish Time: 1424

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): -29 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): -4 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|-----------------------------|--------|--------|
| Temperature: | 80 °F | 78 °F |
| Barometric Pressure: | 30.17 | 30.12 |
| Prevailing Wind Direction: | NE | NE |
| General Weather Conditions: | Cloudy | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|----------------------|-------|-------|
| Temperature: | 80 °F | 78 °F |
| Barometric Pressure: | 30.17 | 30.12 |

PID readings at sample location (ppm): NM

Photographs taken before sampling? Yes **If Yes, what time:** 1040 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? NA **If yes, how long?** ---

Windows open? NA **Ventilation fans?** NA

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? NA **If yes, provide detail:** ---

Did any of the occupants NOT follow instruction for residents? NA **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Outdoor sample
Air intake at 4.7'
Canister attached to tree outside of 17 Tufts Street
Weather station at same location



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - Tufts - O - 2B

Date: 6/29/06

Sampling personnel: K. Wolfe

Summa Canister ID: M046

Flow Regulator ID: MFC30

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1033

Sampling Finish Time: 1427

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |
| | |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): -31 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): -5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

| Environmental Conditions (Outside): | Before Sampling | After Sampling |
|-------------------------------------|-----------------|----------------|
| Temperature: | 80 °F | 78 °F |
| Barometric Pressure: | 30.17 | 30.12 |
| Prevailing Wind Direction: | NE | NE |
| General Weather Conditions: | Cloudy | Cloudy |

| Environmental Conditions (At Sample Location): | Before Sampling | After Sampling |
|--|-----------------|----------------|
| Temperature: | 80 °F | 78 °F |
| Barometric Pressure: | 30.17 | 30.12 |

PID readings at sample location (ppm): NM

Photographs taken before sampling? Yes **If Yes, what time:** 1033 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? NA **If yes, how long?** ---

Windows open? NA **Ventilation fans?** NA

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? NA **If yes, provide detail:** ---

Did any of the occupants NOT follow instruction for residents? NA **If yes, describe below:** ---

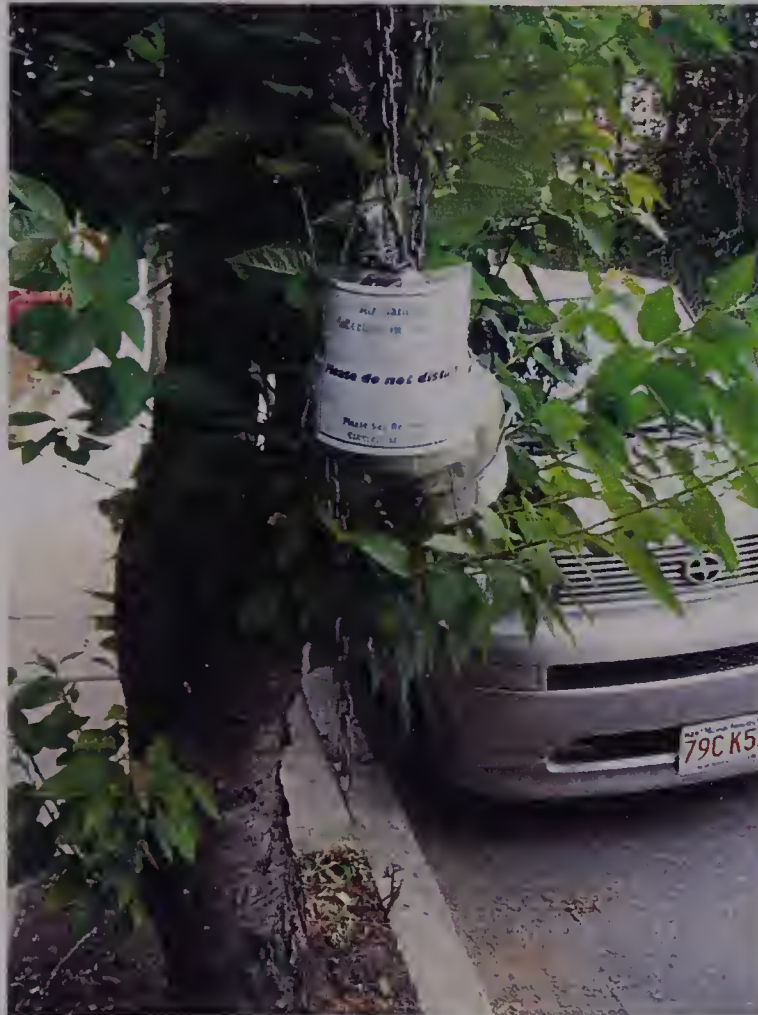
Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Outdoor sample

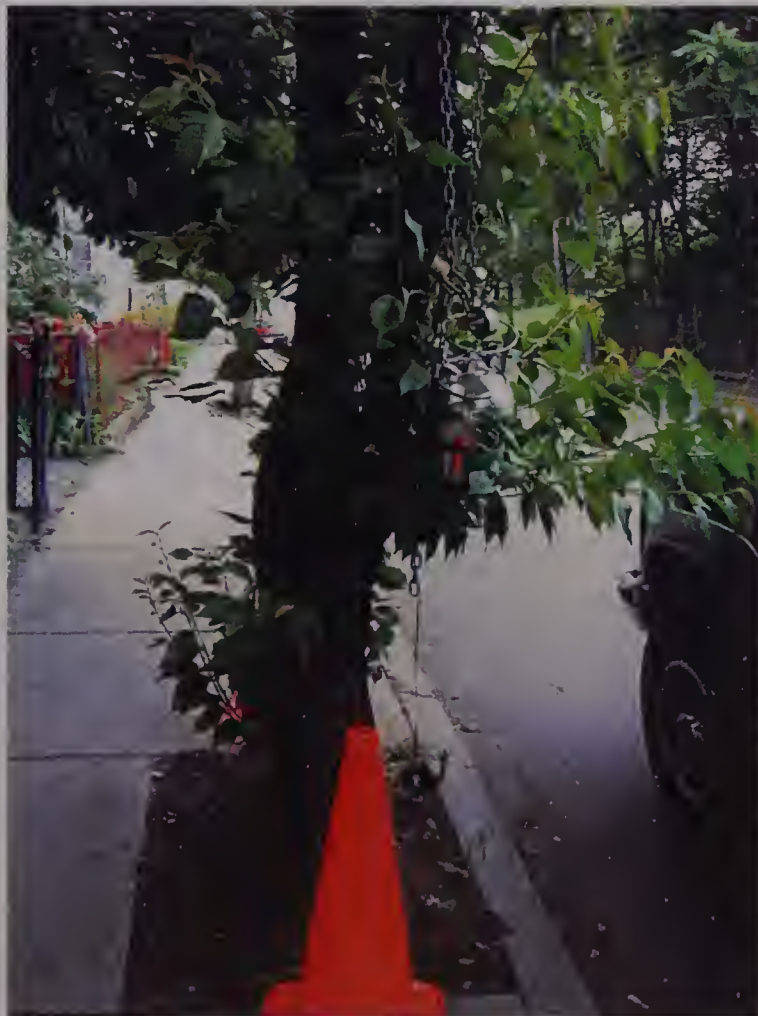
Air intake at 4.9'

Canister attached to fence on North side of 50 Tufts Street property

Outdoor Sample 1- Day 1 (045160-Tufts-O-1A)
6/28/06



Outdoor Sample 1- Day 2 (045160-Tufts-O-2A)
6/29/06



Outdoor Sample 2- Day 1 (045160-Tufts-O-1B)
6/28/06



Outdoor Sample 2- Day 2 (045160-Tufts-O-2B)
2/29/06





AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - 11/13Tufts - 1

Date: 6/29/06
Sampling personnel: K. Wolfe
Summa Canister ID: M129
Flow Regulator ID: MFC007
Sample Type / Analysis Method: TO15/Summa
Sampling Start Time: 1124
Sampling Finish Time: 1533

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No
Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): -31 in-Hg Flow Controller: --- Separate gauge: ---
Pressure gauge reading (After sample collected): -2 in-Hg Flow Controller: --- Separate gauge: ---

| Environmental Conditions (Outside): | Before Sampling | After Sampling |
|-------------------------------------|-----------------|----------------|
| Temperature: | 77 °F | 79 °F |
| Barometric Pressure: | 30.17 | 30.12 |
| Prevailing Wind Direction: | NE | NE |
| General Weather Conditions: | Cloudy | Cloudy |

| Environmental Conditions (At Sample Location): | Before Sampling | After Sampling |
|--|-----------------|----------------|
| Temperature: | 68 °F | 68 °F |
| Barometric Pressure: | 30.16 | 30.16 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes If Yes, what time: 1124 Taken by: K. Wolfe
Photographs taken after sampling? No If Yes, what time: --- Taken by: ---

Was the building aired out prior to sample collection? No If yes, how long? ---
Windows open? No Ventilation fans? Air conditioner was running
Was there significant precipitation within 12 hours of (or during) the sampling event? No
Were any of the residents home during sampling? Yes If yes, provide detail: One tenant was home
Did any of the occupants NOT follow instruction for residents? No If yes, describe below: ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 3.8'
Canister on top of a box that sat on top of the coffee table in the living room



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - 11/13Tufts - B

Date: 6/29/06

Sampling personnel: K. Wolfe

Summa Canister ID: M057

Flow Regulator ID: MC063

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1126

Sampling Finish Time: 1535

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): -29 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): -3 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|-----------------------------|--------|--------|
| Temperature: | 77 °F | 79 °F |
| Barometric Pressure: | 30.17 | 30.12 |
| Prevailing Wind Direction: | NE | NE |
| General Weather Conditions: | Cloudy | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|----------------------|-------|-------|
| Temperature: | 67 °F | 68 °F |
| Barometric Pressure: | 30.16 | 30.16 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1126 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? Yes- Window open in basement **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** One tenant was home upstairs

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 5.5'

Canister on top of a bookshelf in basement

11/13 Tufts Street- First Floor (045160-11/13Tufts-1)
6/29/06



11/13 Tufts Street- Basement (045160-11/13Tufts-B)
6/29/06





AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - 19 Tufts - 1

Date: 6/29/06

Sampling personnel: K. Wolfe

Summa Canister ID: M156

Flow Regulator ID: MC071

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1153

Sampling Finish Time: 1550

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): -30 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): -4 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|-----------------------------|--------|--------|
| Temperature: | 77 °F | 79 °F |
| Barometric Pressure: | 30.16 | 30.12 |
| Prevailing Wind Direction: | NE | NE |
| General Weather Conditions: | Cloudy | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|----------------------|-------|-------|
| Temperature: | 74 °F | 74 °F |
| Barometric Pressure: | 30.14 | 30.16 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1153 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? Yes- Window open in basement **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** Mrs. Laurentano was on the first floor

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 3.1'

Canister on top of table in dining room on first floor



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - 19 Tufts - B

Date: 6/29/06
Sampling personnel: K. Wolfe
Summa Canister ID: M142
Flow Regulator ID: MC033
Sample Type / Analysis Method: TO15/Summa
Sampling Start Time: 1156
Sampling Finish Time: 1553

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No
Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): -29 in-Hg Flow Controller: --- Separate gauge: ---
Pressure gauge reading (After sample collected): -4 in-Hg Flow Controller: --- Separate gauge: ---

| Environmental Conditions (Outside): | Before Sampling | After Sampling |
|-------------------------------------|-----------------|----------------|
| Temperature: | 77 °F | 79 °F |
| Barometric Pressure: | 30.16 | 30.12 |
| Prevailing Wind Direction: | NE | NE |
| General Weather Conditions: | Cloudy | Cloudy |

| Environmental Conditions (At Sample Location): | Before Sampling | After Sampling |
|--|-----------------|----------------|
| Temperature: | 70 °F | 71 °F |
| Barometric Pressure: | 30.16 | 30.16 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes If Yes, what time: 1156 Taken by: K. Wolfe
Photographs taken after sampling? No If Yes, what time: --- Taken by: ---

Was the building aired out prior to sample collection? No If yes, how long? ---
Windows open? Yes- Window open in basement Ventilation fans? No
Was there significant precipitation within 12 hours of (or during) the sampling event? No
Were any of the residents home during sampling? Yes If yes, provide detail: Mrs. Laurentano was on the first floor
Did any of the occupants NOT follow instruction for residents? No If yes, describe below: ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 3.4'
Canister on top of a rolled up rug that sat on a bench in the basement



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - 19 Tufts - C

Date: 6/29/06

Sampling personnel: K. Wolfe

Summa Canister ID: M155

Flow Regulator ID: MC074

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1158

Sampling Finish Time: 1555

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): -30 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): -5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|-----------------------------|--------|--------|
| Temperature: | 77 °F | 79 °F |
| Barometric Pressure: | 30.16 | 30.12 |
| Prevailing Wind Direction: | NE | NE |
| General Weather Conditions: | Cloudy | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|----------------------|-------|-------|
| Temperature: | 70 °F | 71 °F |
| Barometric Pressure: | 30.16 | 30.16 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1156 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? Yes- Window open in basement **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** Mrs. Laurentano was on the first floor

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 3.4'

Canister on top of a rolled up rug that sat on a bench in the basement

19 Tufts Street- First Floor (045160-19Tufts-1)
6/29/06



19 Tufts Street- Basement (045160-19Tufts-B and 045160-19Tufts-C)
6/29/06





AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - 9 Tufts - 1R

Date: 7/24/06

Sampling personnel: K. Wolfe

Summa Canister ID: M002

Flow Regulator ID: MC018

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1054

Sampling Finish Time: 1456

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: 29.5 in/hr Separate gauge: ---

Pressure gauge reading (After sample collected): Flow Controller: 5 in/hr Separate gauge: ---

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

| Environmental Conditions (Outside): | Before Sampling | After Sampling |
|-------------------------------------|-----------------|----------------|
| Temperature: | 92.3° | 93.3° |
| Barometric Pressure: | 30.05 | 30.05 |
| Prevailing Wind Direction: | None | None |
| General Weather Conditions: | Sunny | Sunny |

| Environmental Conditions (At Sample Location): | Before Sampling | After Sampling |
|--|-----------------|----------------|
| Temperature: | 80.4° | 78.3° |
| Barometric Pressure: | 30.05 | 30.05 |

| | | |
|--|---|---|
| PID readings at sample location (ppm) | 0 | 0 |
|--|---|---|

Photographs taken before sampling? Yes If Yes, what time: 1054 Taken by: KAW

Photographs taken after sampling? No If Yes, what time: NA Taken by: NA

Was the building aired out prior to sample collection? No If yes, how long? NA

Windows open? No **Ventilation fans?** Air conditioner running

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes If yes, provide detail: One adult man

Did any of the occupants NOT follow instruction for residents? Please see Pre-Sampling Survey If yes, describe below:

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 4'5"

Barometer stopped working during sampling

GEI not provided with a separate gauge

Time/vacuum readings not taken during sampling as to disturb the residents as little as possible

First floor had two apartments: 1R refers to the apartment on the right when entering the front door



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - 9 Tufts - 1L

Date: 7/24/06

Sampling personnel: K. Wolfe

Summa Canister ID: M141

Flow Regulator ID: MC072

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1052

Sampling Finish Time: 1454

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: 29 in/hr Separate gauge: ---

Pressure gauge reading (After sample collected): Flow Controller: 4 in/hr Separate gauge: ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|-----------------------------|-------|-------|
| Temperature: | 92.3° | 93.3° |
| Barometric Pressure: | 30.05 | 30.05 |
| Prevailing Wind Direction: | None | None |
| General Weather Conditions: | Sunny | Sunny |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|----------------------|-------|-------|
| Temperature: | 88.2° | 93.3° |
| Barometric Pressure: | 30.07 | 30.06 |

PID readings at sample location (ppm)

0

0

Photographs taken before sampling? Yes If Yes, what time: 1052 Taken by: KAW

Photographs taken after sampling? No If Yes, what time: NA Taken by: NA

Was the building aired out prior to sample collection? No If yes, how long? NA

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes If yes, provide detail: One adult pregnant woman

Did any of the occupants NOT follow instruction for residents? Please see Pre-Sampling Survey If yes, describe below:

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 3'11"

Barometer stopped working during sampling

GEI not provided with a separate gauge

Time/vacuum readings not taken during sampling as to disturb the residents as little as possible

First floor had two apartments: 1L refers to the apartment on the left when entering the front door



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - 9 Tufts - BR

Date: 7/24/06

Sampling personnel: K. Wolfe

Summa Canister ID: M161

Flow Regulator ID: MFC53

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1101

Sampling Finish Time: 1500

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: 30 in/hr Separate gauge: ---

Pressure gauge reading (After sample collected): Flow Controller: 4 in/hr Separate gauge: ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|-----------------------------|-------|-------|
| Temperature: | 92.3° | 93.3° |
| Barometric Pressure: | 30.05 | 30.05 |
| Prevailing Wind Direction: | None | None |
| General Weather Conditions: | Sunny | Sunny |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|----------------------|-------|-------|
| Temperature: | 77.0° | 77.2° |
| Barometric Pressure: | 30.03 | 30.04 |

PID readings at sample location (ppm)

0

0

Photographs taken before sampling? Yes If Yes, what time: 1101 Taken by: KAW

Photographs taken after sampling? No If Yes, what time: NA Taken by: NA

Was the building aired out prior to sample collection? No If yes, how long? NA

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No If yes, provide detail:

Did any of the occupants NOT follow instruction for residents? Please see Pre-Sampling Survey If yes, describe below:

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 4'4"

Barometer stopped working during sampling

GEI not provided with a separate gauge

Time/vacuum readings not taken during sampling as to disturb the residents as little as possible

9 Tufts Street- First Floor Right Apartment (045160-9Tufts-1R)
7/24/06



9 Tufts Street- First Floor Left Apartment (045160-9Tufts-1L)
7/24/06



9 Tufts Street- Basement Right (045160-9Tufts-BR)
7/24/06





AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - 25 Tufts - 1

Date: 8/1/06

Sampling personnel: K. Wolfe

Summa Canister ID: M131

Flow Regulator ID: MC070

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0953

Sampling Finish Time: 1346

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure?

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 29 in-Hg Flow Controller: Separate gauge: ---

Pressure gauge reading (After sample collected): 5 in-Hg Flow Controller: Separate gauge: ---

| Environmental Conditions (Outside): | Before Sampling | After Sampling |
|-------------------------------------|-----------------|----------------|
| Temperature: | 84.6°F | 91.7°F |
| Barometric Pressure: | 29.9 | 29.84 |
| Prevailing Wind Direction: | W | W |
| General Weather Conditions: | Cloudy | Mostly sunny |

| Environmental Conditions (At Sample Location): | Before Sampling | After Sampling |
|--|-----------------|----------------|
| Temperature: | 85°F | 89°F |
| Barometric Pressure: | 29.91 | 29.84 |

PID readings at sample location (ppm) 0 0

Photographs taken before sampling? Yes If Yes, what time: 0953 Taken by: KAW

Photographs taken after sampling? No If Yes, what time: Taken by:

Was the building aired out prior to sample collection? No If yes, how long?

Windows open? Yes Ventilation fans? No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes If yes, provide detail: One adult tenant

Did any of the occupants NOT follow instruction for residents? See survey If yes, describe below:

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake @ 3'1"

Tenant requested moving the canister off of the glass table and onto kitchen counter

New air intake @ 4.5'



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - 25 Tufts - B

Date: 8/1/06

Sampling personnel: K. Wolfe

Summa Canister ID: M066

Flow Regulator ID: MFC41

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0955

Sampling Finish Time: 1341

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure?

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 29 in-Hg **Flow Controller:** **Separate gauge:** ---

Pressure gauge reading (After sample collected): 4.5 in-Hg **Flow Controller:** **Separate gauge:** ---

| Environmental Conditions (Outside): | Before Sampling | After Sampling |
|-------------------------------------|-----------------|----------------|
| Temperature: | 84.6°F | 91.7°F |
| Barometric Pressure: | 29.9 | 29.84 |
| Prevailing Wind Direction: | W | W |
| General Weather Conditions: | Cloudy | Mostly sunny |

| Environmental Conditions (At Sample Location): | Before Sampling | After Sampling |
|--|-----------------|----------------|
| Temperature: | 77°F | 79.8°F |
| Barometric Pressure: | 29.91 | 29.87 |

| | | |
|---------------------------------------|---|---|
| PID readings at sample location (ppm) | 0 | 0 |
|---------------------------------------|---|---|

Photographs taken before sampling? Yes **If Yes, what time:** 0955 **Taken by:** KAW

Photographs taken after sampling? No **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? Bulkhead open **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? See survey **If yes, describe below:**

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake @ 4'2"

25 Tufts Street- First Floor (045160-25Tufts-1)
8/1/06



25 Tufts Street- Basement (045160-25Tufts-B)
8/1/06





AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - 23 Tufts - 1

Date: 8/3/06

Sampling personnel: L. Welch

Summa Canister ID: M069

Flow Regulator ID: MC002

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1636

Sampling Finish Time: 2019

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: 28 in/hr Separate gauge: ---

Pressure gauge reading (After sample collected): Flow Controller: 3 in/hr Separate gauge: ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|-----------------------------|------------------|---------------------|
| Temperature: | 80-85° | 75-80° |
| Barometric Pressure: | 29.76 | 29.88 |
| Prevailing Wind Direction: | West | West |
| General Weather Conditions: | Overcast, Breezy | Dusk, Partly Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|----------------------|-------|--------|
| Temperature: | 70° | 68-70° |
| Barometric Pressure: | 29.77 | 29.86 |

PID readings at sample location (ppm)

0

0

Photographs taken before sampling? No If Yes, what time: Taken by:

Photographs taken after sampling? No If Yes, what time: NA Taken by: NA

Was the building aired out prior to sample collection? No If yes, how long? NA

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes If yes, provide detail: One adult female and one child male

Did any of the occupants NOT follow instruction for residents? Please see Pre-Sampling Survey If yes, describe below:

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 4'2"

Ceiling Height at 8'

Outside PID = 0 ppb with ppbRAE (before and after sampling)

No photo taken



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - 23 Tufts - B

Date: 8/3/06

Sampling personnel: L. Welch

Summa Canister ID: M138

Flow Regulator ID: MC064

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1630

Sampling Finish Time: 2020

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: 29 in/hr Separate gauge: ---

Pressure gauge reading (After sample collected): Flow Controller: 3 in/hr Separate gauge: ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|-----------------------------|------------------|---------------------|
| Temperature: | 85° | 75-80° |
| Barometric Pressure: | 29.76 | 29.88 |
| Prevailing Wind Direction: | West | West |
| General Weather Conditions: | Overcast, Breezy | Dusk, Partly Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|----------------------|-------|--------|
| Temperature: | 70° | 68-70° |
| Barometric Pressure: | 29.77 | 29.86 |

PID readings at sample location (ppm)

0

0

Photographs taken before sampling? No If Yes, what time: Taken by:

Photographs taken after sampling? No If Yes, what time: NA Taken by: NA

Was the building aired out prior to sample collection? No If yes, how long? NA

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No If yes, provide detail:

Did any of the occupants NOT follow instruction for residents? Please see Pre-Sampling Survey If yes, describe below:

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 3'9"

Ceiling Height at 6'7"

Outside PID = 0 ppb with ppbRAE (before and after sampling)

No photo taken



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - 27 Tufts - 1

Date: 8/3/06

Sampling personnel: K. Wolfe

Summa Canister ID: M112

Flow Regulator ID: MFC004

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0958

Sampling Finish Time: 1356

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: 30 in/hr Separate gauge: ---

Pressure gauge reading (After sample collected): Flow Controller: 5 in/hr Separate gauge: ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|-----------------------------|--------------|--------------|
| Temperature: | 92.3° | 93.3° |
| Barometric Pressure: | 29.74 | 29.92 |
| Prevailing Wind Direction: | S | S |
| General Weather Conditions: | Sunny, Muggy | Sunny, Muggy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|----------------------|-------|-------|
| Temperature: | 88.7° | 92.1° |
| Barometric Pressure: | 29.74 | 29.71 |

PID readings at sample location (ppm) 3-4 ppm

0

Photographs taken before sampling? Yes If Yes, what time: 0958 Taken by: KAW

Photographs taken after sampling? No If Yes, what time: NA Taken by: NA

Was the building aired out prior to sample collection? No If yes, how long? NA

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No If yes, provide detail:

Did any of the occupants NOT follow instruction for residents? Please see Pre-Sampling Survey If yes, describe below:

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 3'9"

Ceiling Height at 8'9"

Outside PID = 1.1 ppb with ppbRAE (before and after sampling)



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045160 - 27 Tufts - B

Date: 8/3/06

Sampling personnel: K. Wolfe

Summa Canister ID: M093

Flow Regulator ID: MFC45

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1000

Sampling Finish Time:

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: 29 in/hr Separate gauge: ---

Pressure gauge reading (After sample collected): Flow Controller: Separate gauge: ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature: 92.3°

93.3°

Barometric Pressure: 29.74

29.92

Prevailing Wind Direction: S

S

General Weather Conditions: Sunny, Muggy

Sunny, Muggy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature: 86.4°

90.4°

Barometric Pressure: 29.76

29.71

PID readings at sample location (ppm)

3-4 ppm

0

Photographs taken before sampling? Yes If Yes, what time: 1000 Taken by: KAW

Photographs taken after sampling? No If Yes, what time: NA Taken by: NA

Was the building aired out prior to sample collection? No If yes, how long? NA

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No If yes, provide detail:

Did any of the occupants NOT follow instruction for residents? Please see Pre-Sampling Survey If yes, describe below:

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 4'3"
Ceiling Height at 7'2"

27 Tufts Street- First Floor (045160-27Tufts-1)
8/3/06



27 Tufts Street- Basement (045160-27Tufts-B)
8/3/06





AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - 27Tufts - 1

Date: 9/28/06

Sampling personnel: K. Wolfe

Summa Canister ID: M086

Flow Regulator ID: MC032

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1031

Sampling Finish Time: 1431

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 29 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 2 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|------------------------------|-------|--------|
| Temperature (°F): | 74.3 | 73.2 |
| Barometric Pressure (in-Hg): | 30.03 | 30.02 |
| Prevailing Wind Direction: | W | W |
| General Weather Conditions: | Sunny | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|------------------------------|-------|-------|
| Temperature (°F): | 73.9 | 74.1 |
| Barometric Pressure (in-Hg): | 30.03 | 30.02 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1038 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 4.0'



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - 27Tufts - B

Date: 9/28/06

Sampling personnel: K. Wolfe

Summa Canister ID: M014

Flow Regulator ID: MC071

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1043

Sampling Finish Time: 1433

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 29.5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 4 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|------------------------------|-------|--------|
| Temperature (°F): | 74.3 | 73.2 |
| Barometric Pressure (in-Hg): | 30.03 | 30.02 |
| Prevailing Wind Direction: | W | W |
| General Weather Conditions: | Sunny | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|------------------------------|-------|-------|
| Temperature (°F): | 72.1 | 72.7 |
| Barometric Pressure (in-Hg): | 30.03 | 30.03 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1043 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 4.5'

Air purifier installed after sampling complete, photo taken

27 Tufts Street- First Floor (045162-27Tufts-1)
9/28/06



27 Tufts Street- Basement (045162-27Tufts-B)
9/28/06





AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - Tufts - O - 1A

Date: 9/28/06

Sampling personnel: K. Wolfe

Summa Canister ID: M072

Flow Regulator ID: MFC41

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1102

Sampling Finish Time: 1448

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 29.5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 4 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|------------------------------|-------|--------|
| Temperature (°F): | 74.5 | 73.2 |
| Barometric Pressure (in-Hg): | 30.03 | 30.02 |
| Prevailing Wind Direction: | W | W |
| General Weather Conditions: | Sunny | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|------------------------------|-------|-------|
| Temperature (°F): | 74.5 | 73.2 |
| Barometric Pressure (in-Hg): | 30.03 | 30.02 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1102 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

OUTDOOR SAMPLE

In tree outside of 17 Tufts Street

Air intake at 4.7'



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - Tufts - O - 1B

Date: 10/2/06

Sampling personnel: K. Wolfe

Summa Canister ID: M142

Flow Regulator ID: MC053

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0844

Sampling Finish Time: 1240

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 30 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 4.5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (⁰F):

53.6

64

Barometric Pressure (in-Hg):

30.08

29.99

Prevailing Wind Direction:

None

SE

General Weather Conditions:

Cloudy

Cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (⁰F):

53.6

64

Barometric Pressure (in-Hg):

30.08

29.99

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 0844 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

OUTDOOR SAMPLE

In tree outside of 17 Tufts Street

Air intake at 4.6'

Weather Station at this location ran 0842-1513



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - Tufts - O - 2A

Date: 9/28/06

Sampling personnel: K. Wolfe

Summa Canister ID: M135

Flow Regulator ID: MFC25

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1109

Sampling Finish Time: 1514

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |
| | |
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| | |
| | |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 31 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F):
Barometric Pressure (in-Hg):
Prevailing Wind Direction:
General Weather Conditions:

74.5
30.01
W
Sunny

73.2
30.02
W
Cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F):
Barometric Pressure (in-Hg):

74.5
30.01

73.2
30.02

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1109 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

OUTDOOR SAMPLE

In fence on northeast corner of 50 Tufts Street property

Air intake at 4.6'



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - Tufts - O - 2B

Date: 10/2/06

Sampling personnel: K. Wolfe

Summa Canister ID: M067

Flow Regulator ID: MFC010

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0839

Sampling Finish Time: 1330

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 30 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F):

53.6

64

Barometric Pressure (in-Hg):

30.08

29.99

Prevailing Wind Direction:

None

SE

General Weather Conditions:

Cloudy

Cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F):

53.6

64

Barometric Pressure (in-Hg):

30.08

29.99

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 0839 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

OUTDOOR SAMPLE

In fence on northeast corner of 50 Tufts Street property

Air intake at 4.6'



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - Tufts - O - 3A

Date: 10/2/06

Sampling personnel: K. Wolfe

Summa Canister ID: M062

Flow Regulator ID: MFC034

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1030

Sampling Finish Time: 1423

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 30 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 4 in-Hg **Flow Controller:** --- **Separate gauge:** ---

| Environmental Conditions (Outside): | Before Sampling | After Sampling |
|-------------------------------------|-----------------|----------------|
| Temperature (°F): | 64 | 64 |
| Barometric Pressure (in-Hg): | 30.01 | 29.99 |
| Prevailing Wind Direction: | SE | SE |
| General Weather Conditions: | Cloudy | Cloudy |

| Environmental Conditions (At Sample Location): | Before Sampling | After Sampling |
|--|-----------------|----------------|
| Temperature (°F): | 64 | 64 |
| Barometric Pressure (in-Hg): | 30.01 | 29.99 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1030 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

OUTDOOR SAMPLE

In fence on Cross Street

Air intake at 4.2'



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - Tufts - O - 4A

Date: 10/2/06

Sampling personnel: K. Wolfe

Summa Canister ID: M031

Flow Regulator ID: MC066

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1036

Sampling Finish Time: 1419

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 28 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|------------------------------|--------|--------|
| Temperature (°F): | 64 | 64 |
| Barometric Pressure (in-Hg): | 30.01 | 29.99 |
| Prevailing Wind Direction: | SE | SE |
| General Weather Conditions: | Cloudy | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|------------------------------|-------|-------|
| Temperature (°F): | 64 | 64 |
| Barometric Pressure (in-Hg): | 30.01 | 29.99 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1036 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

OUTDOOR SAMPLE

In fence on Alston Street

Air intake at 4.0'



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - Tufts - O - 5A

Date: 10/2/06

Sampling personnel: K. Wolfe

Summa Canister ID: M078

Flow Regulator ID: MC074

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1043

Sampling Finish Time: 1429

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 30.5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|------------------------------|--------|--------|
| Temperature (°F): | 64 | 64 |
| Barometric Pressure (in-Hg): | 30.01 | 29.99 |
| Prevailing Wind Direction: | SE | SE |
| General Weather Conditions: | Cloudy | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|------------------------------|-------|-------|
| Temperature (°F): | 64 | 64 |
| Barometric Pressure (in-Hg): | 30.01 | 29.99 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1043 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

OUTDOOR SAMPLE

In fence on corner of Hadley Court and Franklin Street

Air intake at 4.4'



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - Tufts - O - 6A

Date: 10/2/06

Sampling personnel: K. Wolfe

Summa Canister ID: M136

Flow Regulator ID: MFC035

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1047

Sampling Finish Time: 1450

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 31 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|------------------------------|--------|--------|
| Temperature (°F): | 64 | 64 |
| Barometric Pressure (in-Hg): | 30.01 | 29.99 |
| Prevailing Wind Direction: | SE | SE |
| General Weather Conditions: | Cloudy | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|------------------------------|-------|-------|
| Temperature (°F): | 64 | 64 |
| Barometric Pressure (in-Hg): | 30.01 | 29.99 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1047 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

OUTDOOR SAMPLE

In fence on Knowlton Street

Air intake at 4.5'

Outdoor Sample Location 1 (045162-Tufts-O-1A)
9/28/06



Outdoor Sample Location 1 (045162-Tufts-O-1B)
10/2/06



Outdoor Sample Location 2 (045162-Tufts-O-2A)
9/28/06



Outdoor Sample Location 2 (045162-Tufts-O-2B)
10/2/06



Outdoor Sample Location 3 (045162-Tufts-O-3A)
10/2/06



Outdoor Sample Location 4 (045162-Tufts-O-4A)
10/2/06



Outdoor Sample Location 5 (045162-Tufts-O-5A)
10/2/06



Outdoor Sample Location 6 (045162-Tufts-O-6A)
10/2/06





AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - 9Tufts - 1R

Date: 10/2/06

Sampling personnel: K. Wolfe

Summa Canister ID: M152

Flow Regulator ID: MC018

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1100

Sampling Finish Time: 1508

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 29 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 6 in-Hg **Flow Controller:** --- **Separate gauge:** ---

| Environmental Conditions (Outside): | Before Sampling | After Sampling |
|-------------------------------------|-----------------|----------------|
| Temperature (°F): | 64 | 64 |
| Barometric Pressure (in-Hg): | 30.01 | 29.99 |
| Prevailing Wind Direction: | SE | SE |
| General Weather Conditions: | Cloudy | Cloudy |

| Environmental Conditions (At Sample Location): | Before Sampling | After Sampling |
|--|-----------------|----------------|
| Temperature (°F): | 69.9 | 70.3 |
| Barometric Pressure (in-Hg): | 30.09 | 30.08 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1100 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** One adult female tenant

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 3.9'

Had to stop sampling when internal pressure was only at 6 in-Hg due to access restraints



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - 9Tufts - 1L

Date: 10/2/06

Sampling personnel: K. Wolfe

Summa Canister ID: M073

Flow Regulator ID: MC003

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1102

Sampling Finish Time: 1510

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 30 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 4 in-Hg **Flow Controller:** --- **Separate gauge:** ---

| Environmental Conditions (Outside): | Before Sampling | After Sampling |
|-------------------------------------|-----------------|----------------|
| Temperature (°F): | 64 | 64 |
| Barometric Pressure (in-Hg): | 30.01 | 29.99 |
| Prevailing Wind Direction: | SE | SE |
| General Weather Conditions: | Cloudy | Cloudy |

| Environmental Conditions (At Sample Location): | Before Sampling | After Sampling |
|--|-----------------|----------------|
| Temperature (°F): | 69.8 | 70.3 |
| Barometric Pressure (in-Hg): | 30.09 | 30.09 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1102 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 4.5'



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - 9Tufts - BR

Date: 10/2/06

Sampling personnel: K. Wolfe

Summa Canister ID: M151

Flow Regulator ID: MC045

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1106

Sampling Finish Time: 1515

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |
| | |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 29 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 6 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|------------------------------|--------|--------|
| Temperature (°F): | 64 | 64 |
| Barometric Pressure (in-Hg): | 30.01 | 29.99 |
| Prevailing Wind Direction: | SE | SE |
| General Weather Conditions: | Cloudy | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|------------------------------|-------|-------|
| Temperature (°F): | 68.2 | 68.4 |
| Barometric Pressure (in-Hg): | 30.08 | 30.08 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1106 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 3.8'

Had to stop sampling when internal pressure was only at 6 in-Hg due to access restraints

Air purifier installed after sampling complete, photo taken

9 Tufts Street- First Floor Right Apartment (045162-9Tufts-1R)
10/2/06



9 Tufts Street- First Floor Left Apartment (045162-9Tufts-1L)
10/2/06



9 Tufts Street- Basement Right (045162-9Tufts-BR)
10/2/06





AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - 11/13Tufts - 1

Date: 9/28/06

Sampling personnel: K. Wolfe

Summa Canister ID: M125

Flow Regulator ID: MC070

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1052

Sampling Finish Time: 1442

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 29 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 4.5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

| Environmental Conditions (Outside): | Before Sampling | After Sampling |
|-------------------------------------|-----------------|----------------|
| Temperature (⁰ F): | 74.3 | 73.2 |
| Barometric Pressure (in-Hg): | 30.03 | 30.02 |
| Prevailing Wind Direction: | W | W |
| General Weather Conditions: | Sunny | Cloudy |

| Environmental Conditions (At Sample Location): | Before Sampling | After Sampling |
|--|-----------------|----------------|
| Temperature (⁰ F): | 73.4 | 74.1 |
| Barometric Pressure (in-Hg): | 30.01 | 30.01 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1052 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** One adult male tenant

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 3.3'



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - 11/13Tufts - B

Date: 9/28/06

Sampling personnel: K. Wolfe

Summa Canister ID: M159

Flow Regulator ID: MC072

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1055

Sampling Finish Time: 1443

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 30 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|------------------------------|-------|--------|
| Temperature (°F): | 74.3 | 73.2 |
| Barometric Pressure (in-Hg): | 30.03 | 30.02 |
| Prevailing Wind Direction: | W | W |
| General Weather Conditions: | Sunny | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|------------------------------|-------|-------|
| Temperature (°F): | 71.4 | 72.3 |
| Barometric Pressure (in-Hg): | 30.02 | 30.02 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1055 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 3.5'

Air purifier installed after sampling complete, photo taken

11/13 Tufts Street- First Floor (045162-11/13Tufts-1)
9/28/06



11/13 Tufts Street- Basement (045162-11/13Tufts-B)
9/28/06





AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - 17Tufts - 1

Date: 10/2/06

Sampling personnel: K. Wolfe

Summa Canister ID: M004

Flow Regulator ID: MFC054

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0901

Sampling Finish Time: 1247

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 30 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|--------------------------------|--------|--------|
| Temperature (⁰ F): | 54 | 64 |
| Barometric Pressure (in-Hg): | 30.01 | 29.99 |
| Prevailing Wind Direction: | None | SE |
| General Weather Conditions: | Cloudy | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|--------------------------------|-------|-------|
| Temperature (⁰ F): | 67.1 | 68.2 |
| Barometric Pressure (in-Hg): | 30.09 | 30.08 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 0901 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 3.0'



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - 17Tufts - B

Date: 10/2/06
Sampling personnel: K. Wolfe
Summa Canister ID: M048
Flow Regulator ID: MC063
Sample Type / Analysis Method: TO15/Summa
Sampling Start Time: 0904
Sampling Finish Time: 1246

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No
Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 29 in-Hg Flow Controller: --- Separate gauge: ---
Pressure gauge reading (After sample collected): 5 in-Hg Flow Controller: --- Separate gauge: ---

| Environmental Conditions (Outside): | Before Sampling | After Sampling |
|-------------------------------------|-----------------|----------------|
| Temperature (°F): | 54 | 64 |
| Barometric Pressure (in-Hg): | 30.01 | 29.99 |
| Prevailing Wind Direction: | None | SE |
| General Weather Conditions: | Cloudy | Cloudy |

| Environmental Conditions (At Sample Location): | Before Sampling | After Sampling |
|--|-----------------|----------------|
| Temperature (°F): | 73.7 | 73.9 |
| Barometric Pressure (in-Hg): | 30.10 | 30.10 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes If Yes, what time: 0904 Taken by: K. Wolfe
Photographs taken after sampling? No If Yes, what time: --- Taken by: ---

Was the building aired out prior to sample collection? No If yes, how long? ---
Windows open? No Ventilation fans? No
Was there significant precipitation within 12 hours of (or during) the sampling event? No
Were any of the residents home during sampling? No If yes, provide detail:
Did any of the occupants NOT follow instruction for residents? No If yes, describe below: ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 3.7'
Air purifier installed after sampling complete, photo taken



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - 17Tufts - C

Date: 10/2/06

Sampling personnel: K. Wolfe

Summa Canister ID: M157

Flow Regulator ID: MC066

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0905

Sampling Finish Time: 1245

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 30 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 0.5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F):

54

64

Barometric Pressure (in-Hg):

30.01

29.99

Prevailing Wind Direction:

None

SE

General Weather Conditions:

Cloudy

Cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F):

73.7

73.9

Barometric Pressure (in-Hg):

30.10

30.10

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 0904 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 3.7'

Air purifier installed after sampling complete, photo taken

17 Tufts Street- First Floor (045162-17Tufts-1)
10/2/06



17 Tufts Street- Basement (045162-17Tufts-B and 045162-17Tufts-C)
10/2/06





AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - 23Tufts - 1

Date: 10/2/06

Sampling personnel: K. Wolfe

Summa Canister ID: M114

Flow Regulator ID: MC019

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1327

Sampling Finish Time: 1735

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 31 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 6 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|------------------------------|--------|--------|
| Temperature (°F): | 64 | 61 |
| Barometric Pressure (in-Hg): | 29.99 | 30.00 |
| Prevailing Wind Direction: | SE | SE |
| General Weather Conditions: | Cloudy | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|------------------------------|-------|-------|
| Temperature (°F): | 71.8 | 72.1 |
| Barometric Pressure (in-Hg): | 30.09 | 30.08 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1327 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** One adult male tenant

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 4.4'

Had to stop sampling when internal pressure was only at 6 in-Hg due to access restraints



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - 23Tufts - B

Date: 10/2/06

Sampling personnel: K. Wolfe

Summa Canister ID: M156

Flow Regulator ID: MFC030

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0928

Sampling Finish Time: 1321

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 31 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|------------------------------|--------|--------|
| Temperature (°F): | 54 | 64 |
| Barometric Pressure (in-Hg): | 30.01 | 29.99 |
| Prevailing Wind Direction: | None | SE |
| General Weather Conditions: | Cloudy | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|------------------------------|-------|-------|
| Temperature (°F): | 73 | 73.2 |
| Barometric Pressure (in-Hg): | 30.08 | 30.08 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 0928 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 3.8'

Air purifier installed after sampling complete, no photo taken

23 Tufts Street- First Floor (045162-23Tufts-1)
10/2/06



23 Tufts Street- Basement (045162-23Tufts-B)
10/2/06





AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - 25Tufts - 1

Date: 10/2/06

Sampling personnel: K. Wolfe

Summa Canister ID: M007

Flow Regulator ID: MC073

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0916

Sampling Finish Time: 1301

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 30 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 3 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F):

54

64

Barometric Pressure (in-Hg):

30.01

29.99

Prevailing Wind Direction:

None

SE

General Weather Conditions:

Cloudy

Cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F):

68.9

69.1

Barometric Pressure (in-Hg):

30.09

30.09

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 0916 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** One adult female tenant

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 4.5'



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - 25Tufts - B

Date: 10/2/06

Sampling personnel: K. Wolfe

Summa Canister ID: M068

Flow Regulator ID: MC038

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0918

Sampling Finish Time: 1300

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 30.5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 5 in-Hg **Flow Controller:** --- **Separate gauge:** ---

| Environmental Conditions (Outside): | Before Sampling | After Sampling |
|-------------------------------------|-----------------|----------------|
| Temperature (°F): | 54 | 64 |
| Barometric Pressure (in-Hg): | 30.01 | 29.99 |
| Prevailing Wind Direction: | None | SE |
| General Weather Conditions: | Cloudy | Cloudy |

| Environmental Conditions (At Sample Location): | Before Sampling | After Sampling |
|--|-----------------|----------------|
| Temperature (°F): | 70.7 | 70.7 |
| Barometric Pressure (in-Hg): | 30.10 | 30.09 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 0918 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 4.2'

Air purifier installed after sampling complete, photo taken

25 Tufts Street- First Floor (045162-25Tufts-1)
10/2/06



25 Tufts Street- Basement (045162-25Tufts-B)
10/2/06





AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - 19Tufts - 1

Date: 10/10/06

Sampling personnel: K. Wolfe

Summa Canister ID: M074

Flow Regulator ID: MFC099

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1053

Sampling Finish Time: 1451

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 32 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 20 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|------------------------------|-------|--------|
| Temperature (°F): | 69 | 68 |
| Barometric Pressure (in-Hg): | 30.11 | 30.10 |
| Prevailing Wind Direction: | None | None |
| General Weather Conditions: | Sunny | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|------------------------------|-------|-------|
| Temperature (°F): | 69 | 68 |
| Barometric Pressure (in-Hg): | 30.10 | 30.10 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1053 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** One female adult tenant and one female child

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 4.0'



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - 19Tufts - B

Date: 10/10/06

Sampling personnel: K. Wolfe

Summa Canister ID: M089

Flow Regulator ID: MC067

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1056

Sampling Finish Time: 1500

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 32 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 20 in-Hg **Flow Controller:** --- **Separate gauge:** ---

| Environmental Conditions (Outside): | Before Sampling | After Sampling |
|-------------------------------------|-----------------|----------------|
| Temperature (°F): | 69 | 68 |
| Barometric Pressure (in-Hg): | 30.11 | 30.10 |
| Prevailing Wind Direction: | None | None |
| General Weather Conditions: | Sunny | Cloudy |

| Environmental Conditions (At Sample Location): | Before Sampling | After Sampling |
|--|-----------------|----------------|
| Temperature (°F): | 68 | 67 |
| Barometric Pressure (in-Hg): | 30.09 | 30.09 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1056 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 3.5'

Home owner opted not to have air purifier installed in basement

There was not enough air being sucked into canister at the end of 4 hours. Accutest said to stop testing and send what was available. If there was enough air to extrapolate results, they would do so.



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Tufts Street

Sample ID: 045162 - 19Tufts - C

Date: 10/10/06

Sampling personnel: K. Wolfe

Summa Canister ID: M111

Flow Regulator ID: MFC013

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1057

Sampling Finish Time: 1502

| During Sampling | |
|-----------------|--------|
| Time | Vacuum |
| | |

Did Summa Canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): 30 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Pressure gauge reading (After sample collected): 8 in-Hg **Flow Controller:** --- **Separate gauge:** ---

Environmental Conditions (Outside):

Before Sampling

After Sampling

| | | |
|------------------------------|-------|--------|
| Temperature (°F): | 69 | 68 |
| Barometric Pressure (in-Hg): | 30.11 | 30.10 |
| Prevailing Wind Direction: | None | None |
| General Weather Conditions: | Sunny | Cloudy |

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

| | | |
|------------------------------|-------|-------|
| Temperature (°F): | 68 | 67 |
| Barometric Pressure (in-Hg): | 30.09 | 30.09 |

PID readings at sample location (ppm): 0 ppm

Photographs taken before sampling? Yes **If Yes, what time:** 1056 **Taken by:** K. Wolfe

Photographs taken after sampling? No **If Yes, what time:** --- **Taken by:** ---

Was the building aired out prior to sample collection? No **If yes, how long?** ---

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** ---

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process, as well as a sketch of the sampling location and sample setup indicating height of air intake from ground surface:

Air intake at 3.5'

Home owner opted not to have air purifier installed in basement

Had to stop sampling when internal pressure was only at 8 in-Hg due to access restraints

19 Tufts Street- First Floor (045162-19Tufts-1)
10/10/06



19 Tufts Street- Basement (045162-19Tufts-B and 045162-19Tufts-C)
10/10/06



Air Purifier Installed in 9 Tufts Street Basement



Air Purifier Installed in 11/13 Tufts Street Basement



Air Purifier Installed in 17 Tufts Street Basement



Air Purifier Installed in 25 Tufts Street Basement

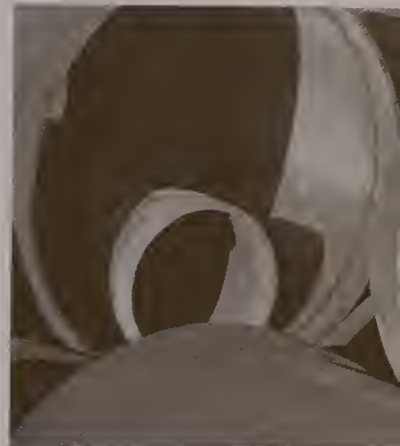


Air Purifier Installed in 27 Tufts Street Basement





Geotechnical
Environmental and
Water Resources
Engineering



Appendix D

Boring Logs and Monitoring Well Installation Reports

GROUNDWATER OBSERVATION WELL REPORT

MW101

Project 50 Tufts Street

Location Somerville, MA

Client UniFirst Corporation

Contractor Geosearch

Driller William Harding and John Rodgers

Inspected by Kelly Champagne

Date Started 5/1/06

Checked by Leslie Lombardo

Date Completed 5/1/06

PG. 1 OF 1

Boring No. MW101

Location Tufts Street

Project No. 045160

SURVEY
DATUM NAVD 1988

GROUND
ELEVATION 27.0'

Asphalt, sand and
gravel,
cobblestones,
concrete

Sand, sand with
gravel

GENERAL SOIL CONDITIONS (Not to Scale)

LENGTH OF SURFACE CASING ABOVE GROUND
SURFACE (FT)

Flush-Mount

LENGTH OF RISER PIPE ABOVE GROUND
SURFACE (FT)

THICKNESS OF SURFACE SEAL BELOW
GROUND SURFACE, IF ANY (FT)

~4"

TYPE OF SURFACE SEAL (indicate any
additional seals)

Cement

ID OF SURFACE CASING (IN)
TYPE OF SURFACE CASING

8"

Roadbox

DEPTH BOTTOM OF CASING (FT)

8"

ID and OD OF RISER PIPE (IN)
TYPE OF RISER PIPE

2"ID/2.25"OD

Sch. 40 PVC

DIAMETER OF BOREHOLE (IN)

4.25"

TYPE OF BACKFILL AROUND RISER PIPE

No. 2 Sand

DEPTH TOP OF SEAL, IF ANY (FT)

5'

TYPE OF SEAL

Bentonite

DEPTH BOTTOM OF SEAL (FT)

7'

DEPTH TOP OF PERVIOUS SECTION

9'

TYPE OF PERVIOUS SECTION

Sch. 40 PVC

DESCRIBE OPENINGS

0.010" Slots

ID and OD OF PERVIOUS SECTION (IN)

2"ID/2.25"OD

TYPE OF BACKFILL AROUND PERVIOUS SECTION

No. 2 Sand

DEPTH BOTTOM OF PERVIOUS SECTION (FT)

19'

DEPTH BOTTOM OF SAND COLUMN (FT)

19'

ELEV./DEPTH TOP OF SEAL, IF ANY (FT)

NA

TYPE OF SEAL

NA

ELEV./DEPTH BOTTOM OF SEAL (FT)

NA

TYPE OF BACKFILL BELOW PERVIOUS SECTION,
IF ANY

NA

NOTES:

GROUNDWATER OBSERVATION WELL REPORT

MW102

Project50 Tufts Street

LocationSomerville, MA

ClientUniFirst Corporation

ContractorGeosearch

DrillerWilliam Harding and John Rodgers

Inspected byKelly Champagne

Date Started5/1/06

Checked byLeslie Lombardo

Date Completed5/1/06

PG.1OF1

Boring No.MW102

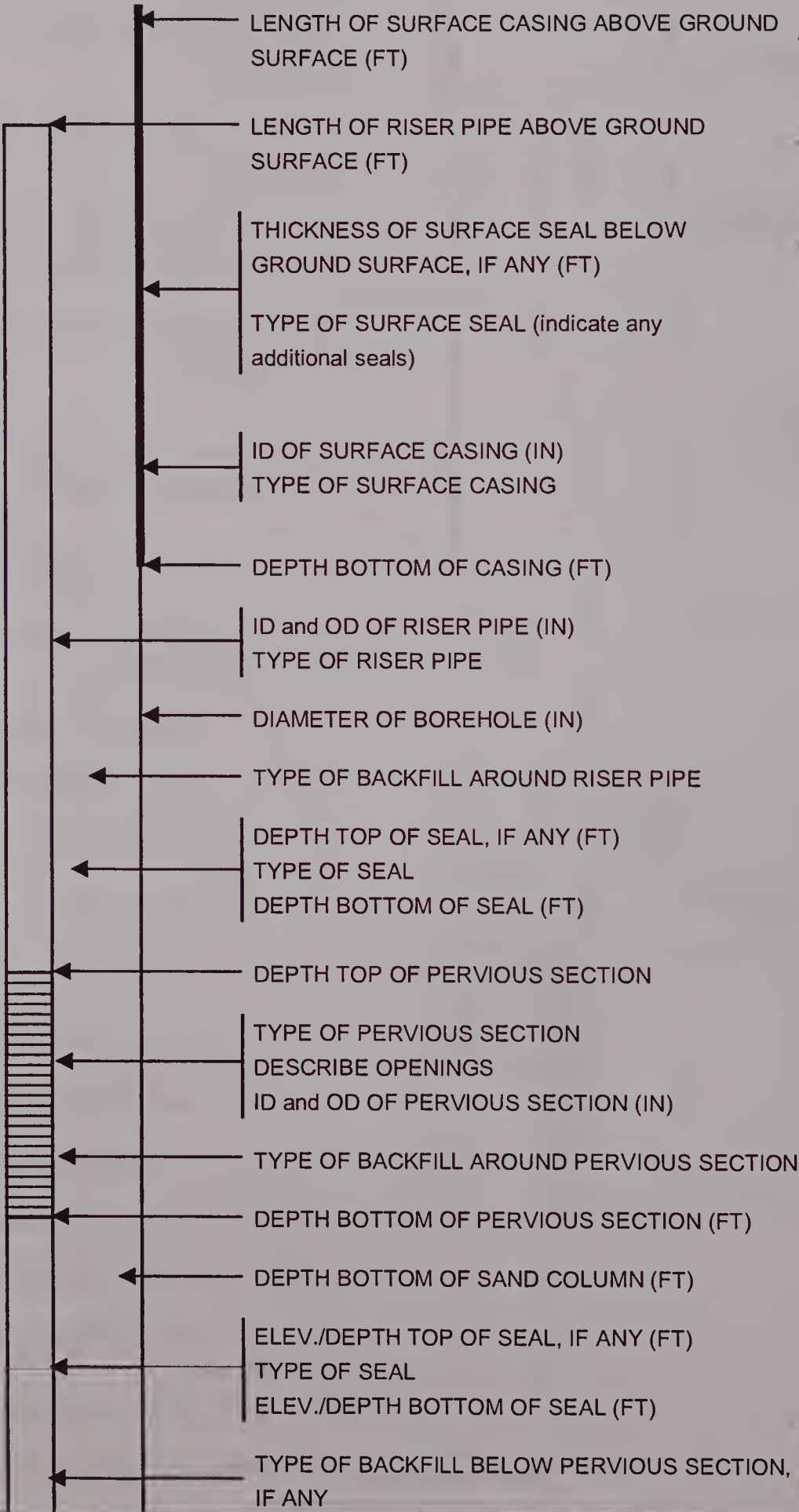
LocationMorton Street

Project No.045160

SURVEY DATUM
NAVD 1988

GROUND ELEVATION
19.2'

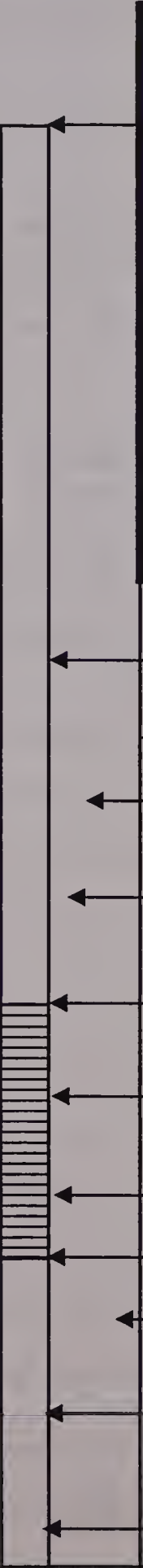
GENERAL SOIL CONDITIONS (Not to Scale)



| |
|--------------|
| Flush-Mount |
| --- |
| ~4" |
| Cement |
| 8" |
| Roadbox |
| 8" |
| 2"ID/2.25"OD |
| Sch. 40 PVC |
| 4.25" |
| No. 2 Sand |
| 2' |
| Bentonite |
| 4' |
| 6' |
| Sch. 40 PVC |
| 0.010" Slots |
| 2"ID/2.25"OD |
| No. 2 Sand |
| 16' |
| 16' |
| NA |
| NA |
| NA |
| NA |

NOTES:

| | | | | | |
|-------------------------------------|--|--|--|------------------------|--|
| GROUNDWATER OBSERVATION WELL REPORT | | | | MW103 | |
| Project 50 Tufts Street | | | | PG. 1 OF 1 | |
| Location Somerville, MA | | | | Boring No. MW103 | |
| Client UniFirst Corporation | | | | Location Morton Street | |
| Contractor Geosearch | | Driller William Harding and John Rodgers | | Project No. 045160 | |
| Inspected by Kelly Champagne | | Date Started 5/1/06 | | | |
| Checked by Leslie Lombardo | | Date Completed 5/1/06 | | | |

| | | | | |
|---|---------------------------|--|---|--------------|
| SURVEY DATUM NAVD 1988 | GROUND ELEVATION 19.8' |  | LENGTH OF SURFACE CASING ABOVE GROUND SURFACE (FT) | Flush-Mount |
| | | | LENGTH OF RISER PIPE ABOVE GROUND SURFACE (FT) | --- |
| | | | THICKNESS OF SURFACE SEAL BELOW GROUND SURFACE, IF ANY (FT) | ~4" |
| | | | TYPE OF SURFACE SEAL (indicate any additional seals) | Cement |
| | | | ID OF SURFACE CASING (IN) | 8" |
| | | | TYPE OF SURFACE CASING | Roadbox |
| | | | DEPTH BOTTOM OF CASING (FT) | 8" |
| | | | ID and OD OF RISER PIPE (IN) | 2"ID/2.25"OD |
| | | | TYPE OF RISER PIPE | Sch. 40 PVC |
| | | | DIAMETER OF BOREHOLE (IN) | 4.25" |
| | | | TYPE OF BACKFILL AROUND RISER PIPE | No. 2 Sand |
| | | | DEPTH TOP OF SEAL, IF ANY (FT) | 2' |
| | | | TYPE OF SEAL | Bentonite |
| | | | DEPTH BOTTOM OF SEAL (FT) | 4' |
| | | | DEPTH TOP OF PERVIOUS SECTION | 6' |
| | | | TYPE OF PERVIOUS SECTION | Sch. 40 PVC |
| DESCRIBE OPENINGS | 0.010" Slots | | | |
| ID and OD OF PERVIOUS SECTION (IN) | 2"ID/2.25"OD | | | |
| TYPE OF BACKFILL AROUND PERVIOUS SECTION | No. 2 Sand | | | |
| DEPTH BOTTOM OF PERVIOUS SECTION (FT) | 16' | | | |
| DEPTH BOTTOM OF SAND COLUMN (FT) | 16' | | | |
| ELEV./DEPTH TOP OF SEAL, IF ANY (FT) | NA | | | |
| TYPE OF SEAL | NA | | | |
| ELEV./DEPTH BOTTOM OF SEAL (FT) | NA | | | |
| TYPE OF BACKFILL BELOW PERVIOUS SECTION, IF ANY | NA | | | |

| GROUNDWATER OBSERVATION WELL REPORT | | | | MW104 | |
|-------------------------------------|--|--|--|-----------------------|--|
| Project 50 Tufts Street | | | | PG. 1 OF 1 | |
| Location Somerville, MA | | | | Boring No. MW104 | |
| Client UniFirst Corporation | | | | Location Tufts Street | |
| Contractor Geosearch | | Driller William Harding and John Rodgers | | Project No. 045160 | |
| Inspected by Kelly Champagne | | Date Started 5/17/06 | | | |
| Checked by Leslie Lombardo | | Date Completed 5/17/06 | | | |

| | | | | |
|--|------------------|---|---|--------------|
| GENERAL SOIL CONDITIONS (Not to Scale) | SURVEY DATUM | NAVD 1988 | LENGTH OF SURFACE CASING ABOVE GROUND SURFACE (FT) | Flush-Mount |
| | GROUND ELEVATION | 17.9' | LENGTH OF RISER PIPE ABOVE GROUND SURFACE (FT) | --- |
| | | | THICKNESS OF SURFACE SEAL BELOW GROUND SURFACE, IF ANY (FT) | ~4" |
| | | | TYPE OF SURFACE SEAL (indicate any additional seals) | Cement |
| | | | ID OF SURFACE CASING (IN) | 3.5" |
| | | | TYPE OF SURFACE CASING | Roadbox |
| | | | DEPTH BOTTOM OF CASING (FT) | 8" |
| | | | ID and OD OF RISER PIPE (IN) | 1"ID/1.25"OD |
| | | | TYPE OF RISER PIPE | Sch. 40 PVC |
| | | | DIAMETER OF BOREHOLE (IN) | 2.5" |
| | | | TYPE OF BACKFILL AROUND RISER PIPE | No. 2 Sand |
| | | | DEPTH TOP OF SEAL, IF ANY (FT) | 2' |
| | | | TYPE OF SEAL | Bentonite |
| | | | DEPTH BOTTOM OF SEAL (FT) | 3' |
| | | | DEPTH TOP OF PERVIOUS SECTION | 5' |
| | | | TYPE OF PERVIOUS SECTION | Sch. 40 PVC |
| | | | DESCRIBE OPENINGS | 0.010" Slots |
| | | | ID and OD OF PERVIOUS SECTION (IN) | 1"ID/1.25"OD |
| | | TYPE OF BACKFILL AROUND PERVIOUS SECTION | No. 2 Sand | |
| | | DEPTH BOTTOM OF PERVIOUS SECTION (FT) | 15' | |
| | | DEPTH BOTTOM OF SAND COLUMN (FT) | 15' | |
| | | ELEV./DEPTH TOP OF SEAL, IF ANY (FT) | NA | |
| | | TYPE OF SEAL | NA | |
| | | ELEV./DEPTH BOTTOM OF SEAL (FT) | NA | |
| | | TYPE OF BACKFILL BELOW PERVIOUS SECTION, IF ANY | NA | |

NOTES:



| | | | | | |
|-------------------------------------|--|--|--|-----------------------|--|
| GROUNDWATER OBSERVATION WELL REPORT | | | | MW105 | |
| Project 50 Tufts Street | | | | PG. 1 OF 1 | |
| Location Somerville, MA | | | | Boring No. MW105 | |
| Client UniFirst Corporation | | | | Location Cross Street | |
| Contractor Geosearch | | Driller William Harding and John Rodgers | | Project No. 045160 | |
| Inspected by Kelly Champagne | | Date Started 5/2/06 | | | |
| Checked by Leslie Lombardo | | Date Completed 5/2/06 | | | |

| | | | | |
|--|---|--|---|-------------|
| GENERAL SOIL CONDITIONS (Not to Scale) | SURVEY DATUM | NAVD 1988 | LENGTH OF SURFACE CASING ABOVE GROUND SURFACE (FT) | Flush-Mount |
| | GROUND ELEVATION | 39.6' | LENGTH OF RISER PIPE ABOVE GROUND SURFACE (FT) | --- |
| | | | THICKNESS OF SURFACE SEAL BELOW GROUND SURFACE, IF ANY (FT) | ~4" |
| | Concrete | TYPE OF SURFACE SEAL (indicate any additional seals) | Cement | |
| | | ID OF SURFACE CASING (IN) | 8" | |
| | Sand with silt and gravel | TYPE OF SURFACE CASING | Roadbox | |
| | | DEPTH BOTTOM OF CASING (FT) | 8" | |
| | Sand, sand with silt | ID and OD OF RISER PIPE (IN) | 2"ID/2.25"OD | |
| | | TYPE OF RISER PIPE | Sch. 40 PVC | |
| | Sand, sand with silt and gravel | DIAMETER OF BOREHOLE (IN) | 4.25" | |
| | | TYPE OF BACKFILL AROUND RISER PIPE | No. 2 Sand | |
| | | DEPTH TOP OF SEAL, IF ANY (FT) | 15' | |
| | | TYPE OF SEAL | Bentonite | |
| | | DEPTH BOTTOM OF SEAL (FT) | 17' | |
| | | DEPTH TOP OF PERVIOUS SECTION | 19' | |
| | TYPE OF PERVIOUS SECTION | Sch. 40 PVC | | |
| | DESCRIBE OPENINGS | 0.010" Slots | | |
| | ID and OD OF PERVIOUS SECTION (IN) | 2"ID/2.25"OD | | |
| | TYPE OF BACKFILL AROUND PERVIOUS SECTION | No. 2 Sand | | |
| | DEPTH BOTTOM OF PERVIOUS SECTION (FT) | 29' | | |
| | DEPTH BOTTOM OF SAND COLUMN (FT) | 29' | | |
| | ELEV./DEPTH TOP OF SEAL, IF ANY (FT) | NA | | |
| | TYPE OF SEAL | NA | | |
| | ELEV./DEPTH BOTTOM OF SEAL (FT) | NA | | |
| | TYPE OF BACKFILL BELOW PERVIOUS SECTION, IF ANY | NA | | |



GEI Consultants, Inc.
1021 Main Street
Winchester, MA 01890

PROJECT NAME: 50 Tufts Street

CITY/STATE: Somerville, Massachusetts

GEI PROJECT NUMBER: 045160

BORING LOG

PAGE

1 of 1

MW101

DRILLING METHOD: Vac Ex./HSA

GROUND SURFACE ELEVATION (FT): 27.0

NORTHING: 2964738.24 EASTING: 767195.02

DRILLED BY: Geosearch W. Harding, J. Mason

LOGGED BY: K. Champagne

LOCATION: Tufts Street

TOTAL DEPTH (FT): 19

VERT. DATUM: NAVD 1988

HOR. DATUM: MA State Plane (NAD 83)

DATE START / END: 4/28/2006 - 5/1/2006

| DEPTH FT. | SAMPLE INFORMATION | | | | | LITHOLOGY | SOIL / BEDROCK DESCRIPTION |
|--------------|--------------------|------------|------------|---------------|--------------|-----------|----------------------------|
| | TYPE and NO. | PEN IN. | REC IN. | Blow Count | PID (ppm) | | |

| | | | | | | | |
|----|----|----|----|----------------------|-----|---|---|
| 0 | S1 | NM | NM | NM | 3.4 | ✓ | S1: (0-2") ASPHALT |
| 2 | | | | | | ✓ | S1: (2-4") WIDELY GRADED SAND AND GRAVEL (SW); ~80% fine to coarse sand, ~20% fine to coarse subangular gravel up to 1.5", dry, tan, FILL. |
| 4 | | | | | | ✓ | S1: (4-9") COBBLESTONES |
| 6 | | | | | | ✓ | S1: (9-12") Similar to S1 (2-4"). |
| 8 | | | | | | ✓ | S1: (12-15") CONCRETE |
| 10 | S2 | 24 | 20 | 6 15 16 20 | 1.3 | ✓ | S1: (15-17") Similar to S1 (2-4"). |
| 12 | S3 | 24 | 19 | 23 20 16 16 | 1.3 | ✓ | S1: (17-19") CONCRETE |
| 14 | S4 | 24 | 21 | 7 14 16 19 | 3.4 | ✓ | S1: (19-84") SILTY SAND WITH GRAVEL (SM); ~65% fine to coarse sand, ~20% fines, ~15% fine to coarse subangular gravel up to 1", dry, brown, FILL. |
| 16 | S5 | 24 | 17 | 6 13 16 25 | 5.5 | ✓ | S1: (84-108") NARROWLY GRADED SAND (SP); Medium sand, dry, tan, FILL. |
| 18 | S6 | 24 | 24 | 20 30 30 40 | 4.1 | ✓ | S2: (0-20") Similar to S1 (19-84"). |
| | | | | | | ✓ | S3: (0-13") NARROWLY GRADED SAND (SP); Fine sand, moist, tan, FILL. |
| | | | | | | ✓ | S3: (13-19") Similar to S3 (0-13") but wet. |
| | | | | | | ✓ | S4: (0-6") Similar to S3 (0-13") but wet. |
| | | | | | | ✓ | S4: (6-12") NARROWLY GRADED SAND WITH GRAVEL (SP); ~85% medium sand, ~15% fine to coarse subangular gravel up to 1/4", wet, tan, FILL. |
| | | | | | | ✓ | S4: (12-21") Similar to S3 (0-13") but wet. |
| | | | | | | ✓ | S5: (0-7") NARROWLY GRADED SAND (SP); Medium sand, wet, tan, FILL. |
| | | | | | | ✓ | S5: (7-17") Similar to S3 (0-13") but wet. |
| | | | | | | ✓ | S6: (0-7") Similar to S3 (0-13") but wet. |
| | | | | | | ✓ | S6: (7-10") Similar to S5 (0-7"). |
| | | | | | | ✓ | S6: (10-19") Similar to S3 (0-13"), but wet. |
| | | | | | | ✓ | S6: (19-24") SILTY SAND WITH GRAVEL (SM); ~65% fine sand, ~15% fines, ~20% coarse subangular gravel up to 1", moist, very dense, tan, TILL. |
| | | | | | | ✓ | Bottom of Borehole, 19.0 ft, no refusal. |

ABBREVIATIONS:

PEN = PENETRATION LENGTH OF SAMPLER OR CORE BARREL
REC = RECOVERY LENGTH OF SAMPLE
PID = PHOTOIONIZATION DETECTOR READING (JAR HEADSPACE)
NM = NOT MEASURED
(ppm) = PARTS PER MILLION
IN. = INCHES
FT. = FEET
HSA = HOLLOW STEM AUGER
VAC EX. = VACUUM EXCAVATION

NOTES:

Vacuum Excavated to 9.5 ft and then backfilled with cuttings on April 28, 2006. Completed boring with Hollow Stem Auger on May 1, 2006. Monitoring Well Installed.

LITHOLOGY:



FILL



TILL



GEI Consultants, Inc.
1021 Main Street
Winchester, MA 01890

PROJECT NAME: 50 Tufts Street

CITY/STATE: Somerville, Massachusetts

GEI PROJECT NUMBER: 045160

BORING LOG

PAGE

1 of 1

MW102

DRILLING METHOD: Vac Ex./HSA

GROUND SURFACE ELEVATION (FT): 19.2

NORTHING: 2964636.48 EASTING: 767510.38

DRILLED BY: Geosearch W. Harding, J. Mason

LOGGED BY: K. Champagne

LOCATION:

Tufts Street

TOTAL DEPTH (FT):

16

VERT. DATUM:

NAVD 1988

HOR. DATUM:

MA State Plane (NAD 83)

DATE START / END:

4/27/2006 - 5/1/2006

SAMPLE INFORMATION

| DEPTH FT. | TYPE and NO. | PEN IN. | REC IN. | Blow Count | PID (ppm) | LITHOLOGY |
|--------------|--------------------|------------|------------|---------------|--------------|-----------|
|--------------|--------------------|------------|------------|---------------|--------------|-----------|

SOIL / BEDROCK DESCRIPTION

| | | | | | | |
|----|----|----|----|----------------------|-----|---|
| 0 | S1 | NM | NM | NM | 0.0 | V |
| 2 | | | | | | |
| 4 | | | | | | |
| 6 | S2 | 24 | 24 | 23 26 26 25 | 4.1 | |
| 8 | S3 | 24 | 5 | 22 20 22 25 | 6.1 | |
| 10 | S4 | 24 | 6 | 9 13 13 14 | 0.0 | |
| 12 | S5 | 24 | 24 | 14 9 14 18 | 3.4 | |
| 14 | S6 | 24 | 12 | 20 25 23 20 | 2.0 | |
| 16 | | | | | | |

S1: (0-6") ASPHALT

S1: (6-9") WIDELY GRADED SAND WITH GRAVEL (SW); ~85% fine to coarse sand, ~15% fine to coarse subangular gravel up to 1.5", dry, tan, FILL.

S1: (9-24") SANDY LEAN CLAY WITH GRAVEL (CL); ~65% lean clay, ~20% fine sand, ~15% coarse subangular gravel up to 3/4", moist, dense, olive, TILL.

S1: (24-72") SANDY LEAN CLAY WITH GRAVEL (CL); ~50% lean clay, ~35% fine sand, ~15% coarse subangular gravel up to 1/2", dry, dense, olive/tan, TILL.

S2: (0-5") SANDY SILT WITH GRAVEL (ML); ~50% non-plastic silt, ~35% fine sand, ~15% fine to coarse subangular gravel up to 1/4", moist, olive/tan, TILL.

S2: (5-10") WIDELY GRADED SAND (SW); Fine to coarse sand, dry, reddish-brown/brown, TILL.

S2: (10-24") Similar to S2 (0-5"), but gravel layer from 12 to 16".

S3: (0-2") LEAN CLAY WITH SAND (CL); ~80% clay, ~20% fine sand, dry, olive, TILL.

S3: (2-5") Similar to S2 (0-5"), but with white/gray fine grained rock in tip of shoe.

S4: (0-11") SILTY SAND AND GRAVEL (SM); ~70% fine sand, ~15% silt, ~15% fine to coarse subangular gravel up to 1", wet, tan, TILL.

S4: (11-13") NARROWLY GRADED SAND AND GRAVEL (SP); ~85% coarse sand, ~15% subangular gravel up to 1/4", wet, black, TILL.

S4: (13-16") WIDELY GRADED SAND WITH GRAVEL (SW); ~65% fine to coarse sand, ~35% coarse subangular gravel up to 1.5", wet, brown, TILL.

S5: SILTY SAND WITH GRAVEL (SM); ~60% fine to coarse sand, ~25% fine to coarse subangular gravel up to 1.5", ~15% silt, wet, tan with some reddish-brown sand, TILL.

S6: NARROWLY GRADED SAND (SP); Coarse sand, wet, tan, TILL.

Bottom of Borehole, 16.0 ft., no refusal.

ABBREVIATIONS:

PEN = PENETRATION LENGTH OF SAMPLER OR CORE BARREL
REC = RECOVERY LENGTH OF SAMPLE
PID = PHOTOIONIZATION DETECTOR READING (JAR HEADSPACE)
NM = NOT MEASURED
(ppm) = PARTS PER MILLION
IN. = INCHES
FT. = FEET
HSA = HOLLOW STEM AUGER
VAC EX. = VACUUM EXCAVATION

NOTES:

Boring vacuum excavated to 6.5 ft and then backfilled with cuttings on April 27, 2006. Boring completed with Hollow Stem Auger on May 1, 2006. Monitoring Well installed.

LITHOLOGY:



FILL



TILL



GEI Consultants, Inc.
1021 Main Street
Winchester, MA 01890

PROJECT NAME: 50 Tufts Street

CITY/STATE: Somerville, Massachusetts

GEI PROJECT NUMBER: 045160

BORING LOG

PAGE

1 of 1

MW103

DRILLING METHOD: Vac Ex./HSA

GROUND SURFACE ELEVATION (FT): 19.8

NORTHING: 2964454.99 EASTING: 767648.42

DRILLED BY: Geosearch W. Harding, J. Mason

LOGGED BY: K. Champagne

LOCATION:

Tufts Street

TOTAL DEPTH (FT):

16

VERT. DATUM:

NAVD 1988

HOR. DATUM:

MA State Plane (NAD 83)

DATE START / END:

4/27/2006 - 5/1/2006

| DEPTH FT. | SAMPLE INFORMATION | | | | | LITHOLOGY | SOIL / BEDROCK DESCRIPTION |
|--------------|--------------------|------------|------------|----------------------|--------------|-----------|---|
| | TYPE and NO. | PEN IN. | REC IN. | Blow Count | PID (ppm) | | |
| 0 | S1 | NM | NM | NM | 0.0 | ✓ | S1: (0-5") ASPHALT |
| 2 | | | | | | ✓ | S1: (5-36") SANDY SILT WITH GRAVEL (ML); ~50% non-plastic silt, ~35% fine to coarse sand, ~15% fine to coarse subangular gravel up to 1/2", moist, brown, FILL. |
| 4 | | | | | | ✓ | S1: (36-48") WIDELY GRADED SAND WITH GRAVEL (SW); ~85% fine to coarse sand, ~15% fine to coarse subangular gravel up to 1", brown, pieces of asphalt-like material, FILL. |
| 6 | S2 | 24 | 16 | 4 8 13 20 | 22.0 | ✓ | S1: (48-60") SILTY SAND WITH GRAVEL (SW-SM); ~45% fine to coarse sand, ~25% non-plastic silt, ~20% fine to coarse subangular gravel up to 1/2", dry, dense, brown, TILL. |
| 8 | S3 | 24 | 20 | 10 20 19 21 | 5.5 | ✓ | S1: (60-72") SILTY GRAVEL WITH SAND (GM); Fine to coarse subangular gravel with silt and widely graded sand, TILL. |
| 10 | S4 | 24 | 15 | 7 18 20 20 | 1.3 | ✓ | S2: (0-3") SANDY SILT WITH GRAVEL (ML); ~60% silt, ~20% fine sand, ~20% fine to coarse subangular gravel up to 3/4", moist, olive/brown, pieces of tar-like material, TILL. |
| 12 | S5 | 24 | 13 | 20 32 27 24 | 8.9 | ✓ | S2: (3-16") NARROWLY GRADED SAND WITH SILT AND GRAVEL (SP-SM); ~70% fine sand, ~20% fine to coarse subangular gravel up to 1.5", ~10% silt, dry, tan, TILL. |
| 14 | S6 | 15 | 13 | 13 20 50/3" | 11.6 | ✓ | S3: (0-12") Similar to S2 (3-16"). |
| 16 | | | | | | ✓ | S3: (12-20") NARROWLY GRADED SAND WITH GRAVEL (SP); ~80% medium sand, ~20% fine to coarse subangular gravel up to 1", dry, tan, TILL. |
| | | | | | | ✓ | S4: Similar to S3 (12-20"), but wet. |
| | | | | | | ✓ | S5: (0-11") Similar to S3 (12-20"), but with ~40% fine to coarse gravel up to 1.75", wet. |
| | | | | | | ✓ | S5: (11-13") WIDELY GRADED SAND (SW); Fine to coarse sand, wet, black/white, TILL. |
| | | | | | | ✓ | S6: NARROWLY GRADED SAND WITH SILT AND GRAVEL (SP); ~55% fine sand, ~35% fine to coarse subangular gravel up to 1.5", ~10% silt, wet, tan, TILL. |
| | | | | | | ✓ | Bottom of Borehole, 16.0 ft., no refusal. |

ABBREVIATIONS:

PEN = PENETRATION LENGTH OF SAMPLER OR CORE BARREL
REC = RECOVERY LENGTH OF SAMPLE
PID = PHOTOIONIZATION DETECTOR READING (JAR HEADSPACE)
NM = NOT MEASURED
(ppm) = PARTS PER MILLION
IN. = INCHES
FT. = FEET
HSA = HOLLOW STEM AUGER
VAC EX. = VACUUM EXCAVATION

NOTES:

Boring vacuum excavated to 6.0 ft. and then backfilled with cuttings on April 27, 2006.
Boring completed with Hollow Stem Auger on May 1, 2006.
Monitoring Well installed.

LITHOLOGY:



FILL



TILL



GEI Consultants, Inc.
1021 Main Street
Winchester, MA 01890

PROJECT NAME: 50 Tufts Street

CITY/STATE: Somerville, Massachusetts

GEI PROJECT NUMBER: 045160

BORING LOG

PAGE

1 of 1

MW104

DRILLING METHOD: Geoprobe

GROUND SURFACE ELEVATION (FT): 17.9

NORTHING: 2964181.07 EASTING: 767524.96

DRILLED BY: Geosearch B. Law

LOGGED BY: K. Champagne

LOCATION:

Tufts Street

TOTAL DEPTH (FT):

15

VERT. DATUM:

NAVD 1988

HOR. DATUM:

MA State Plane (NAD 83)

DATE START / END:

5/17/2006 - 5/17/2006

SAMPLE INFORMATION

| DEPTH FT. | TYPE and NO. | PEN IN. | REC IN. | Blow Count | PID (ppm) | LITHOLOGY |
|--------------|--------------------|------------|------------|---------------|--------------|-----------|
| | | | | | | |

SOIL / BEDROCK DESCRIPTION

| | | | | | | |
|----|-----|----|----|------|-----|--|
| 0 | GP1 | 60 | 33 | PUSH | 0.0 | |
| 2 | | | | | 0.4 | |
| 4 | | | | | | |
| 6 | GP2 | 60 | 19 | PUSH | 0.8 | |
| 8 | | | | | | |
| 10 | | | | | | |
| 12 | GP3 | 60 | 29 | PUSH | 1.5 | |
| 14 | | | | | | |

GP1: (0-17") SILTY SAND WITH GRAVEL (SM); ~50% fine to medium sand, ~25% silt, ~25% fine to coarse subangular gravel up to 1.5", moist, brown, FILL.

GP1: (17-20") WIDELY GRADED GRAVEL (GW); ~85% fine to coarse subangular gravel, ~15% fine to coarse sand, dry, orange/tan, FILL.

GP1: (20-27") WIDELY GRADED SAND WITH SILT AND GRAVEL (SW-SM); ~65% fine to coarse sand, ~20% fine to coarse subangular gravel, ~15% silt, clay lense from 22 to 33", dry, brown, TILL.

GP1: (27-33") SANDY SILT WITH GRAVEL (ML); ~65% silt, ~20% fine sand, ~15% subangular gravel up to 1", moist, olive, TILL.

GP2: Similar to S1 (27-33").

GP3: (0-12") Similar to S1 (27-33"), but wet.

GP3: (12-16") WIDELY GRADED SAND WITH SILT (SW-SM); ~65% coarse sand, ~20% fine to medium sand, ~15% silt, wet, brown, TILL.

GP3: (16-19") SILTY SAND (SM); ~80% fine sand, ~20% fines, wet, dark brown, TILL.

S3: (19-29") SILTY SAND (SM); ~70% fine sand, ~30% nonplastic fines, wet, olive, TILL.

Bottom of Borehole, 15.0 ft., no refusal.

ABBREVIATIONS:

PEN = PENETRATION LENGTH OF SAMPLER OR CORE BARREL
REC = RECOVERY LENGTH OF SAMPLE
PID = PHOTOIONIZATION DETECTOR READING (JAR HEADSPACE)
NM = NOT MEASURED
(ppm) = PARTS PER MILLION
IN. = INCHES
FT. = FEET
HSA = HOLLOW STEM AUGER
VAC EX. = VACUUM EXCAVATION

NOTES:

LITHOLOGY:



FILL



TILL



GEI Consultants, Inc.
1021 Main Street
Winchester, MA 01890

PROJECT NAME: 50 Tufts Street

CITY/STATE: Somerville, Massachusetts

GEI PROJECT NUMBER: 045160

BORING LOG

PAGE

1 of 2

MW105

DRILLING METHOD: Vac Exc/HSA

GROUND SURFACE ELEVATION (FT): 39.6

NORTHING: 2964723.47 EASTING: 766919.62

DRILLED BY: Geosearch W. Harding, J. Mason

LOGGED BY: K. Champagne

LOCATION: Tufts Street

TOTAL DEPTH (FT): 29

VERT. DATUM: NAVD 1988

HOR. DATUM: MA State Plane (NAD 83)

DATE START / END: 4/28/2006 - 5/2/2006

| DEPTH FT. | SAMPLE INFORMATION | | | | | LITHOLOGY | SOIL / BEDROCK DESCRIPTION |
|--------------|--------------------|------------|------------|----------------------|--------------|-----------|--|
| | TYPE and NO. | PEN IN. | REC IN. | Blow Count | PID (ppm) | | |
| 0 | S1 | 108 | NM | NM | 0.0 | ✓ | S1: (0-6") CONCRETE |
| 2 | | | | | | ✓ | S1: (6-36") WIDELY GRADED SAND WITH GRAVEL (SW); ~80% fine to coarse sand, ~20% fine to coarse subangular gravel up to 0.75", dry, brown, some ash-like material, FILL . |
| 4 | | | | | | ✓ | S1: (36-108") SILTY SAND WITH GRAVEL (SM); ~65% fine to coarse sand, ~20% fines, ~15% fine to coarse gravel up to 0.5", moist, brown, TILL. |
| 6 | | | | | | ✓ | |
| 8 | | | | | | ✓ | |
| 10 | S2 | 24 | 2 | 3 4 4 7 | 0.0 | ✓ | S2: Similar to S1 (36-108"). |
| 12 | S3 | 24 | 24 | 10 10 25 30 | 0.0 | ✓ | S3: (0-15") SILT WITH SAND (ML); ~75% silt, ~25% fine sand, moist, tan/olive, TILL. |
| 14 | S4 | 24 | 23 | 27 25 37 32 | 2.7 (1.3) | ✓ | S3: (15-24") NARROWLY GRADED SAND (SP); Medium sand, dry, tan, TILL. S4: (0-11") Similar to S3 (15-24"). |
| 16 | S5 | 24 | 19 | 40 29 39 27 | 2.0 (1.3) | ✓ | S4: (11-23") SAND WITH SILT AND GRAVEL (SP-SM); ~70% fine sand, ~20% fine to coarse subangular gravel up to 1.5", ~10% silt, dry, dense, tan, TILL. |
| 18 | S6 | 24 | 19 | 25 25 22 29 | 2.0 | ✓ | S5: (0-7") Similar to S4 (11-23"). S5: (7-9") GRAVEL; Gray, fine grained, TILL. |
| 20 | S7 | 24 | 19 | 7 20 24 32 | 0.0 | ✓ | S5: (9-13") Similar to S4 (11-23"). S5: (13-16") NARROWLY GRADED SAND (SP); Medium sand, dry, black/brown, TILL . S5: (16-19") Similar to S4 (11-23"). |

ABBREVIATIONS:

PEN = PENETRATION LENGTH OF SAMPLER OR CORE BARREL
REC = RECOVERY LENGTH OF SAMPLE
PID = PHOTOIONIZATION DETECTOR READING (JAR HEADSPACE)
NM = NOT MEASURED
(ppm) = PARTS PER MILLION
IN. = INCHES
FT. = FEET
HSA = HOLLOW STEM AUGER
VAC EX. = VACUUM EXCAVATION

NOTES:

Boring vacuum excavated to 9.0 ft and then backfilled with cuttings on April 28, 2006. Boring completed with Hollow Stem Auger on May 2, 2006. Monitoring Well installed. When OVM readings were measured for S4 and S5, the ambient air reading was 1.3 ppm.

LITHOLOGY:



FILL



TILL



GEI Consultants, Inc.
1021 Main Street
Winchester, MA 01890

PROJECT NAME: 50 Tufts Street

CITY/STATE: Sommerville, Massachusetts

GEI PROJECT NUMBER: 045160

BORING LOG

PAGE

2 of 2

MW105

SAMPLE INFORMATION

| DEPTH FT. | TYPE and NO. | PEN IN. | REC IN. | Blow Count | PID (ppm) | RQD (%) |
|--------------|--------------------|------------|------------|---------------|--------------|------------|
|--------------|--------------------|------------|------------|---------------|--------------|------------|

LITHOLOGY

SOIL / BEDROCK DESCRIPTION

22

24

26

28

| | | | | | |
|-----|----|----|----------------------|-----|--|
| S8 | 24 | 19 | 16 28 24 30 | 1.3 | |
| S9 | 24 | 14 | 19 37 37 47 | 0.0 | |
| S10 | 24 | 15 | 22 22 25 27 | 0.0 | |
| S11 | 24 | 18 | 27 32 50 44 | 0.0 | |

S6: (0-14") Similar to S4 (11-23").

S6: (14-19") Similar to S3 (15-24").

S7: Similar to S4 (11-23").

S8: Similar to S4 (11-23"), but wet in bottom 2".

S9: (0-8") Similar to S4 (11-23"), but wet.

S9: (8-14") ROCK FRAGMENTS; Reddish-brown (8-10"), gray (10-14").

S10: NARROWLY GRADED SAND WITH GRAVEL (SP); ~65% fine sand, ~35% fine to coarse subangular gravel up to 1.5", wet, dense, tan sand, gravel is reddish-brown/brown/gray, TILL .

S11: (0-3") WIDELY GRADED SAND (SW); Fine to coarse sand, TILL.

S11: (3-18") Similar to S4 (11-23"), but wet.

Bottom of Borehole, 29 ft, no refusal.

ABBREVIATIONS:

PEN = PENETRATION LENGTH OF SAMPLER OR CORE BARREL
REC = RECOVERY LENGTH OF SAMPLE
PID = PHOTOIONIZATION DETECTOR READING (JAR HEADSPACE)
NM = NOT MEASURED
(ppm) = PARTS PER MILLION
IN. = INCHES
FT. = FEET
HSA = HOLLOW STEM AUGER
VAC EX. = VACUUM EXCAVATION

NOTES:

Boring vacuum excavated to 9.0 ft and then backfilled with cuttings on April 28, 2006. Boring completed with Hollow Stem Auger on May 2, 2006. Monitoring Well installed. When OVM readings were measured for S4 and S5, the ambient air reading was 1.3 ppm.

LITHOLOGY:



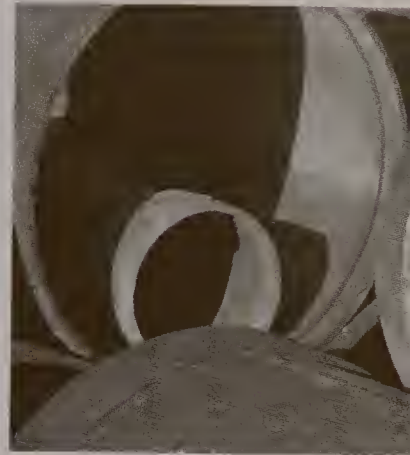
FILL



TILL



Geotechnical
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Water Resources
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Appendix E

Soil Chemical Testing Laboratory Data Sheets



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Environmental and
Water Resources
Engineering



Appendix F

Groundwater Chemical Testing Laboratory Data Sheets



Geotechnical
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Water Resources
Engineering



Appendix G

Hazardous Waste Manifests



COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter)

| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator's US EPA ID No. | | Manifest Document No. | | 2. Page 1 of 1 | | Information in the shaded areas is not required by Federal law. | |
|--|--|---|--|--|--|--|--|---|--|
| 3. Generator's Name and Mailing Address Unifirst 65 Johnspin Road Wilmington MA 01857 | | All: Brian Keegan, Engineering Manager | | A. State Manifest Document Number MA Q 883144 | | B. State Gen. ID 50 Tufts Street Somerville MA 02143 | | | |
| 4. Generator's Phone (781) 658-8888 | | 5. Transporter 1 Company Name TMC Services, Inc. | | 6. US EPA ID Number MAR000502138 | | C. State Trans. ID | | | |
| 7. Transporter 2 Company Name | | 8. US EPA ID Number | | D. Transporter's Phone (603) 885-5737 | | E. State Trans. ID | | | |
| 9. Designated Facility Name and Site Address General Chemical Corporation 133-135 Leland Street Framingham MA 01702 | | 10. US EPA ID Number MAD018371078 | | F. Transporter's Phone () | | G. State Facility's ID NOT REQUIRED | | H. Facility's Phone (508) 872-5000 | |
| 11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) Hazardous waste, solid, n.o.s. 8. HAZ077, III (PCE Contaminated Soil) (RC: D039) | | | | 12. Containers No. Type | | 13. Total Quantity | | 14. Unit Wt/Vol | |
| b. Non-Hazardous, did (oil bearing rungs) 121 - 91 | | | | 2 002 DM | | 110 Gallons | | MA 119 | |
| c. | | | | | | | | | |
| d. | | | | | | | | | |
| J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.) (S.E.T) ERG 171 | | | | K. Handling Codes for Wastes Listed Above | | | | | |
| a. | | | | c. | | a. | | c. | |
| b. | | | | d. | | b. | | d. | |
| 15. Special Handling Instructions and Additional Information | | | | EMERGENCY 800-223-8225 TMC Job # | | | | | |
| 16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. | | | | | | | | | |
| Printed/Typed Name Stephen Aquilino | | | | Signature <i>[Signature]</i> | | | | Date Month Day Year 11 11 96 | |
| 17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name | | | | Signature | | | | Date Month Day Year | |
| 18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name | | | | Signature | | | | Date Month Day Year | |
| 19. Discrepancy Indication Space | | | | | | | | | |
| 20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19 | | | | | | | | | |
| Printed/Typed Name Stephen | | | | Signature <i>[Signature]</i> | | | | Date Month Day Year 11 11 96 | |



COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter)

UNIFORM HAZARDOUS
WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1
of 1

Information in the shaded areas
is not required by Federal law.

3. Generator's Name and Mailing Address

Unifirst
68 Johnstn Road
Wilmington MA 01857

At: Brian Keegan, Engineering Manager

A. State Manifest Document Number

MA Q 883145

B. State Gen. ID

63 Tuls Street

Somerville MA 02143

4. Generator's Phone (781) 656-8888

5. Transporter 1 Company Name

TMC Services, Inc.

6. US EPA ID Number

MAR000502138

C. State Trans. ID

MAK44629

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone (603) 900-3737

E. State Trans. ID

9. Designated Facility Name and Site Address

General Chemical Corporation
133-135 Leland Street

Frammingham MA 01702

10. US EPA ID Number

MAD019371079

F. Transporter's Phone ()

G. State Facility's ID NOT REQUIRED

H. Facility's Phone (603) 872-8000

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)

Hazardous waste, solid, n.o.s.
2, NA3077, III (PCE Contaminated Soil)
(RC: D039)

12. Containers
No. Type

6 04 DM 02000 P

13. Total Quantity

14. Unit
Wt/Vol

WASTE NO.

0 0 3 9
0 2 1 0

b. Non-Hazardous waste (Solid, Liquid, Gas, Sludge, or Other)

c.

d.

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.)

(S.E.T) ERGE171

K. Handling Codes for Wastes Listed Above

a.

c.

a.

c.

b.

d.

b.

d.

15. Special Handling Instructions and Additional Information

EMERGE 800-223-8955
TMC Job #

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable International and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

Signature

Date

Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date

Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19

Printed/Typed Name

Signature

Date

Month Day Year



COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter)

UNIFORM HAZARDOUS
WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1
of 1

Information in the shaded areas
is not required by Federal law.

3. Generator's Name and Mailing Address

Att: Brian Keegan, Engineering Manager

Unitel
68 Johnson Road
Wilmington MA 01857

4. Generator's Phone (978) 658-8688

5. Transporter 1 Company Name

TMC Services, Inc.

7. Transporter 2 Company Name

6. US EPA ID Number

MAR000502138

8. US EPA ID Number

10. US EPA ID Number

9. Designated Facility Name and Site Address

General Chemical Corporation
123-130 Leland Street
Framingham MA 01702

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)

Hazardous waste, solid, D.C.E.
9, RA3077, III (PCE Contaminated Soil)
(RC: D039)

12. Containers
No. Type

602DA 700P

602DM 700P

13. Total Quantity

700P

14. Unit
Wt/Vol

700P

15. WASTE NO.

0030

b. Non-Hazardous Soil (Contaminated)
123-130 Leland Street
Framingham MA 01702

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.)

(G.E.T) ERG171

K. Handling Codes for Wastes Listed Above

a. c. b. d.

15. Special Handling Instructions and Additional Information

EMERGENCY 800-223-8865
TMC Job #

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

Signature

Date

Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date

Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19

Printed/Typed Name

Signature

Date

Month Day Year

In case of emergency or spill, immediately call the National Response Center (800) 424-8802

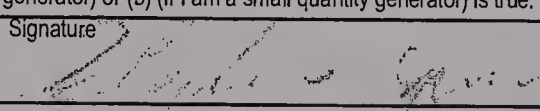


DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter)

301

| | | | | | | | | | | | |
|--|--|--|--|--------------------------------|--|---|--|---|--|--|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator's US EPA ID No. MA P 9178 (A) 56888888 | | Manifest Document No. 06180 | | 2. Page 1 of 1 | | Information in the shaded areas is not required by Federal law. | | | |
| 3. Generator's Name and Mailing Address Unifirst 55 Johnson Road Wilmington MA 01897 4. Generator's Phone (978) 656-6888 | | | | | | Att: Brian Keegan, Engineering Manager | | | | A. State Manifest Document Number MA Q 883147 | |
| 5. Transporter 1 Company Name TMC Services, Inc. | | | | | | 6. US EPA ID Number MAR000502138 | | B. State Gen. ID 50 TMC Street Somerville MA 02143 | | | |
| 7. Transporter 2 Company Name | | | | | | 8. US EPA ID Number | | C. State Trans. ID | | | |
| 9. Designated Facility Name and Site Address General Chemical Corporation 100-100 Limerick Street Framingham MA 01702 JONES ENVIRONMENTAL SERVICES (INC), INC. 263 HILLOCK ST LUDLOW MA 01558 | | | | | | 10. US EPA ID Number MAD049075734 MAD049075734 | | D. Transporter's Phone (508) 552-3737 | | | |
| 11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) Hazardous waste, solid, n.e.s. 9, NA3077, III (PCF Contaminated Soil) (RC 0002) | | | | | | 12. Containers No. Type | | 13. Total Quantity | | 14. Unit Wt/Vol | |
| b. Hazardous waste, liquid, n.e.s. 9, NA 3082, III (PCF HCF water) (RC 1034) | | | | | | 5 DM00250.6 | | | | WASTE NO. D 0 3 4 U 2 1 0 | |
| J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.) (G.E.T.) ERG2171 | | | | | | K. Handling Codes for Wastes Listed Above | | | | | |
| 15. Special Handling Instructions and Additional Information EMERGE 800-223-8865 TMC Job # | | | | | | | | | | | |
| 16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. | | | | | | | | | | | |
| Printed/Typed Name John A. ... | | | | | | Signature [Signature] | | Date Month Day Year 01 04 1996 | | | |
| 17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Rob Miller | | | | | | Signature [Signature] | | Date Month Day Year 01 04 1996 | | | |
| 18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name | | | | | | Signature | | Date Month Day Year 01 04 1996 | | | |
| 19. Discrepancy Indication Space | | | | | | | | | | | |
| 20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19 Printed/Typed Name [Name] | | | | | | Signature [Signature] | | Date Month Day Year 01 04 1996 | | | |

| | | | | | | | | | | | | | |
|--|---|--|---|--------------------------|--|--|-------------|---|-------------------|-----------------|-------------|----|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number MP 9 7 8 0 5 1 8 8 8 8 | | 2. Page 1 of 1 | | 3. Emergency Response Phone 900 223-8885 | | 4. Manifest Tracking Number 000481757 FLE | | | | | |
| | | 5. Generator's Name and Mailing Address Unit First 68 Joseph Road Wilmington MA 01807 Generator's Phone: 9 7 8 6 5 8 - 8 8 8 8 | | | | Generator's Site Address (if different than mailing address) Land parcel 60 Tufts Street Somerville MA 02143 | | | | | | | |
| 6. Transporter 1 Company Name TMC Services, Inc. | | U.S. EPA ID Number MAR000502138 | | | | | | | | | | | |
| 7. Transporter 2 Company Name | | U.S. EPA ID Number | | | | | | | | | | | |
| 8. Designated Facility Name and Site Address Norland Environmental, Inc. 275 Albany Avenue Providence RI 02905 Facility's Phone: 401 781-6340 | | U.S. EPA ID Number RID040098352 | | | | | | | | | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | | | | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes | | | |
| | | | | | | No. | Type | | | | | | |
| | X | 1. Hazardous waste, solid, n.o.s. liquid 9. NA3082, III, (TCE/PCE Water) | | | | 3 | Drum | 110 | G | D039 | U210 | | |
| | | 2. | | | | | | | | | | | |
| | | 3. | | | | | | | | | | | |
| | 4. | | | | | | | | | | | | |
| 14. Special Handling Instructions and Additional Information (RE.T) ERG171 TMC Job # 1006 NDC | | | | | | | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | | | | | | | |
| Generator's/Offor's Printed/Typed Name STEPHEN AQUILINO | | | | | | Signature  | | Month Day Year 10 05 16 | | | | | |
| TRANSPORTER INT'L | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. | | Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | | | | | | |
| | 17. Transporter Acknowledgment of Receipt of Materials | | | | | | | | | | | | |
| DESIGNATED FACILITY | Transporter 1 Printed/Typed Name David Shuler | | | | | | Signature | | Month Day Year | | | | |
| | Transporter 2 Printed/Typed Name | | | | | | Signature | | Month Day Year | | | | |
| 18. Discrepancy | | | | | | | | | | | | | |
| 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | | | | | | | | |
| Manifest Reference Number: _____ | | | | | | | | | | | | | |
| 18b. Alternate Facility (or Generator) U.S. EPA ID Number | | | | | | | | | | | | | |
| Facility's Phone: _____ | | | | | | | | | | | | | |
| 18c. Signature of Alternate Facility (or Generator) Month Day Year | | | | | | | | | | | | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | | | | | | | |
| 1. | | | | 2. | | | | 3. | | | | 4. | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | | | | | | | | |
| Printed/Typed Name | | | | | | Signature | | Month Day Year | | | | | |

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